

Fluor Hanford, Inc.  
Post Office Box 1000  
Richland, Washington 99352

0060050

**FLUOR**

**Memorandum**

To: S. J. Trent Date: T4180-03-SLF-012  
From: S. L. Fitzgerald, Manager Telephone: June 19, 2003  
WSCF Analytical Services

cc:	W/Attachments	W/O Attachments
	T. F. Dale	S3-28 C. M. Caprio
	S. L. Fitzgerald	S3-30 D. L. Renberger
	H. K. Meznarich	S3-30 L. C. Swanson
	J. E. Trechter	S3-30 File/LB
	M. Neely	S3-30

Subject: FINAL RESULTS FOR 200-PW-2/200-PW-4 OU- SAMPLE DELIVERY GROUP  
WSCF20030699- SAF NUMBER F03-007

References: (1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEN-001, October 31, 2002  
(2) HNF-SD-CD-QAPP-017, Rev. 5, Waste Sampling and Characterization Facility Quality Assurance Plan

This letter contains a narrative (Attachment 1) for the sample delivery group (WSCF20030699), the analytical results (Attachment 2) and the sample receipt information (Attachment 3).

slf/ddw

Attachments 3

**RECEIVED**  
AUG 11 2003  
**EDMC**



**T4180-03-SLF-012**

**ATTACHMENT 1**

**NARRATIVE**

Consisting of 3 pages  
Cover page not included

<b>Sample Delivery Group</b>	<b>WSCF20030699</b>
<b>Sample Matrix</b>	<b>Water</b>
<b>Sample Visual</b>	<b>Clear</b>
<b>SAF Number</b>	<b>F03-007</b>
<b>Data Deliverable</b>	<b>Summary Report</b>

### Introduction

Two (2) water samples (B171B1 and B171B2) from the GPP were received at the WSCF Laboratory on May 21, 2003. The samples were analyzed for those analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Protection Program- Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 1) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 2) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information. Copies of the chain of custody and Request for Sample Analysis forms are included as Attachment 3.

### Analytical Methodology for Requested Analyses

- ICP-MS Metals by EPA Method 200.8 and ICP-AES Metals by EPA SW-846 Method 6010A. Analytical work was performed with no deviations to the approved procedures.
- VOA's by EPA SW-846 Method 8260A. Analytical work was performed with no deviations to the approved procedure. The 1-Butanol requested under EPA SW-846 Method 8015 was reported under this method. The Benzyl alcohol requested under this method was reported under EPA SW-846 Method 8270B.
- Semi-VOA's by EPA SW-846 Method 8270B. Analytical work was performed with no deviations to the approved procedure. The Benzyl alcohol requested under EPA SW-846 Method 8260A was reported under this method.
- Alcohols and Glycols by EPA SW-846 Method 8015. Analytical work was performed with no deviations to the approved procedure. The 1-Butanol requested under this method was reported under EPA SW-846 Method 8260A.
- WTPH-D by WDOE Method NWTPH-Dx. Analytical work was performed with no deviations to the approved procedure.
- WTPH-G by WDOE Method NWTPH-Gx. Analytical work was performed with no deviations to the approved procedure.

- IC Anions by EPA SW-846 Methods 300.0. Analytical work was performed with no deviations to the approved procedure for Anions.
- CN by EPA SW-846 Method 335.2. Analytical work was performed with no deviations to the approved procedure.
- Cr+6 by EPA SW-846 Method 7196. Analytical work was performed with no deviations to the approved procedure.
- All RadChem analyses (AEA's, GEA) were run by WSCF internal WDOE accredited procedures. Analytical work was performed with no deviations to the approved procedures.

### **Comments**

ICP-AES and ICP-MS Metals – The hold time(s) for these analyses were met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-34, 2-35, and 2-36 for QC details.

VOA's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-44 and 2-45 for QC details.

Semi-VOA's – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-28, 2-29, 2-30 and 2-31 for QC details.

Alcohols and Glycols – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-42 for QC details.

WTPH-D – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-32 for details.

WTPH-G – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-43 for details.

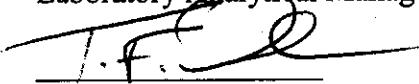
IC Anions – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-25 and 2-26 for QC details.

CN – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-33 for QC details.

Cr+6 – The hold time(s) for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-26 for QC details.

RadChem – There are no hold times associated with these methods. Except for GEA, a Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GPP Letter of Instruction. See page(s) 2-37, 2-38, 2-39, 2-40, and 2-41 for QC details.

This Summary Report is in compliance with the SOW, both technically and for completeness. Release of the data contained in this hard copy report has been authorized by the WSCF Laboratory Analytical Manager and Client Services, as verified by the following signature.



---

Troy Dale

WSCF Production Control

#### Abbreviations

Hg – Mercury	Am – Americium
IC – Ion Chromatography	Cm - Curium
ICP – Inductively Coupled Plasma	Pu – Plutonium
ICP/AES – ICP/Atomic Emission Spectroscopy	Np – Neptunium
ICP/MS – ICP/Mass Spectrometry	GEA – Gamma Energy Analysis
Total U – Total Uranium	H3 – Tritium
AT/TB – Total Alpha/Total Beta	Sr – Strontium 89, 90
AEA – Alpha Energy Analysis	WTPH-D – Total Hydrocarbons-Diesel
WTPH-G – Total Hydrocarbons-Gasoline	Cr+6 – Hexavalent Chromium
CN – Cyanide	NH4 - Ammonium

**T4180-03-SLF-012**

**ATTACHMENT 2**

**ANALYTICAL RESULTS**

**Consisting of 45 pages  
Cover page not included**

**WSCF  
ANALYTICAL RESULTS REPORT**

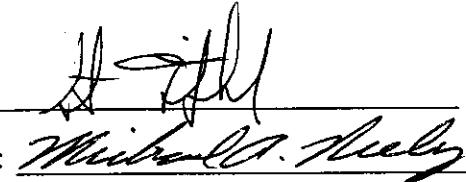
for

**Ground Water Protection Program**

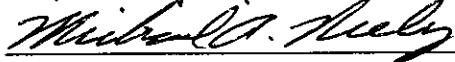
**Richland, WA 99352**

**Attention: Steve Trent**

Analytical:



Client Services:



Contract#: F03-007

Report#: WSCF20030699

Report Date: 19-jun-2003

Report W004/ver. 5.1

Ground Water Protection Program

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
FO3-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF							Analyze Sample Receive		
					Method	RQ	Result	Unit	DF	MDL				
W030000498	B171B1	TRENT	57-12-5	Cyanide by Midi/Spectrophotom	WATER	LA-695-402	U	< 4.00	ug/L	4.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	18540-29-9	Hexavalent chromium	WATER	LA-265-403	U	< 2.00e-03	ug/mL	2.0e-03	05/29/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	540-51-2	2-Bromoethanol	WATER	Organics		8.30e+03	ug/L	5.0e+03	06/04/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	60-29-7	Diethyl ether	WATER	Organics	U	< 5.00e+03	ug/L	5.0e+03	06/04/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	107-21-1	Ethylene glycol	WATER	Organics	U	< 5.00e+03	ug/L	5.0e+03	06/04/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	67-56-1	Methanol	WATER	Organics	U	< 1.00e+03	ug/L	1.0e+03	06/04/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14596-10-2	Am-241 by AEA	WATER	LA-508-471	U	0.0810	pCi/L	0.17	06/10/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	WATER	LA-508-471		130	%	0.0	06/10/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	24959-67-9	Bromide (Br) by IC	WATER	LA-533-410	U	< 0.0450	mg/L	1.00	0.045	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	16887-00-6	Chloride (Cl) by IC	WATER	LA-533-410	U	< 0.0140	mg/L	1.00	0.014	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	16984-48-8	Fluoride (F) by IC	WATER	LA-533-410	U	< 7.00e-03	mg/L	1.00	7.0e-03	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	N03-N	Nitrate (N) by IC	WATER	LA-533-410	U	< 5.00e-03	mg/L	1.00	5.0e-03	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	N02-N	Nitrite (N) by IC	WATER	LA-533-410	U	< 9.00e-03	mg/L	1.00	9.0e-03	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	14265-44-2	Phosphate (P) by IC	WATER	LA-533-410	U	< 0.0130	mg/L	1.00	0.013	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	14808-79-8	Sulfate (SO4) by IC	WATER	LA-533-410	U	< 0.0240	mg/L	1.00	0.024	05/22/03	05/21/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Ac-228 Rel.% Count Error (GEA)	WATER	LA-508-462		300	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14331-83-0	Ac-228 by GEA	WATER	LA-508-462	U	5.08	pCi/L	25	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Am-241 Rel.% Count Error (GEA)	WATER	LA-508-462		215	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14596-10-2	Am-241 by GEA	WATER	LA-508-462	U	7.49	pCi/L	27	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Bi-212 Rel.% Count Error (GEA)	WATER	LA-508-462		242	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14913-49-6	Bi-212 by GEA	WATER	LA-508-462	U	-12.5	pCi/L	51	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Bi-214 Rel.% Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14733-03-0	Bi-214 by GEA	WATER	LA-508-462	U	-59.9	pCi/L	20	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Ce-144 Rel.% Count Error (GEA)	WATER	LA-508-462		455	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	14762-78-8	Ce-144 by GEA	WATER	LA-508-462	U	-6.20	pCi/L	46	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	E,T,C	Co-60 Rel.% Count Error (GEA)	WATER	LA-508-462		231	%	0.0	06/03/03	05/21/03	05/21/03	
W030000498	B171B1	TRENT	10198-40-0	Co-60 by GEA	WATER	LA-508-462	U	-1.91	pCi/L	7.0	06/03/03	05/21/03	05/21/03	

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample</b>	<b>Receive</b>	
					<b>Method</b>	<b>RQ</b>						
W030000498	B171B1	TRENT	E,T,C	Cs-134 Rel. % Count Error (GEA)	WATER	LA-508-462	599	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	13967-70-9	Cs-134 by GEA	WATER	LA-508-462	U	-0.729	pCi/L	7.4	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Cs-137 Rel. % Count Error (GEA)	WATER	LA-508-462	682	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	10045-97-3	Cs-137 by GEA	WATER	LA-508-462	U	0.604	pCi/L	7.2	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Eu-152 Rel. % Count Error (GEA)	WATER	LA-508-462	771	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	14683-23-9	Eu-152 by GEA	WATER	LA-508-462	U	-1.61	pCi/L	21	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Eu-154 Rel. % Count Error (GEA)	WATER	LA-508-462	1.00e+03	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	15585-10-1	Eu-154 by GEA	WATER	LA-508-462	U	-0.0399	pCi/L	19	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Eu-155 Rel. % Count Error (GEA)	WATER	LA-508-462	186	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	14391-16-3	Eu-155 by GEA	WATER	LA-508-462	U	-7.15	pCi/L	22	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Nb-94 Rel. % Count Error (GEA)	WATER	LA-508-462	261	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	14681-63-1	Nb-94 by GEA	WATER	LA-508-462	U	1.55	pCi/L	6.9	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Pb-212 Rel. % Count Error (GEA)	WATER	LA-508-462	163	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	15092-94-1	Pb-212 by GEA	WATER	LA-508-462	U	4.79	pCi/L	14	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Pb-214 Rel. % Count Error (GEA)	WATER	LA-508-462	100	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	15067-28-4	Pb-214 by GEA	WATER	LA-508-462	U	-63.7	pCi/L	20	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Ra-226 Rel. % Count Error (GEA)	WATER	LA-508-462	100	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	13982-63-3	Ra-226 by GEA	WATER	LA-508-462	U	-59.9	pCi/L	20	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Ra-228 Rel. % Count Error (GEA)	WATER	LA-508-462	300	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	15262-20-1	Ra-228 by GEA	WATER	LA-508-462	U	5.08	pCi/L	25	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Ru-103 Rel. % Count Error (GEA)	WATER	LA-508-462	244	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	13968-53-1	Ru-103 by GEA	WATER	LA-508-462	U	-1.60	pCi/L	6.7	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Ru-106 Rel. % Count Error (GEA)	WATER	LA-508-462	93.5	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	13967-48-1	Ru-106 by GEA	WATER	LA-508-462	U	41.1	pCi/L	70	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Sb-125 Rel. % Count Error (GEA)	WATER	LA-508-462	424	%	0.0	06/03/03	05/21/03	
W030000498	B171B1	TRENT	14234-35-6	Sb-125 by GEA	WATER	LA-508-462	U	2.79	pCi/L	20	06/03/03	05/21/03
W030000498	B171B1	TRENT	E,T,C	Sn-113 Rel. % Count Error (GEA)	WATER	LA-508-462	247	%	0.0	06/03/03	05/21/03	

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>		<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample Receive</b>
						<b>Method</b>	<b>RQ</b>				
W030000498	B171B1	TRENT	13966-06-8	Sn-113 by GEA	WATER	LA-508-462	U	2.24	pCi/L	9.5	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Sn-126 Rel. % Count Error (GEA)	WATER	LA-508-462		595	%	0.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	15832-50-5	Sn-126 by GEA	WATER	LA-508-462	U	-1.62	pCi/L	14	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Th-234 Rel. % Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	15065-10-8	Th-234 by GEA	WATER	LA-508-462	U	11.2	pCi/L	2.5e+02	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Tl-208 Rel. % Count Error (GEA)	WATER	LA-508-462		217	%	0.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	14913-50-8	Tl-208 by GEA	WATER	LA-508-462	U	-2.01	pCi/L	6.8	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	U-235 Rel. % Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	15117-96-1	U-235 by GEA	WATER	LA-508-462	U	-2.47	pCi/L	48	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Zn-65 Rel. % Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	13982-39-3	Zn-65 by GEA	WATER	LA-508-462	U	-11.5	pCi/L	14	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-69-9	Bismuth by ICP	WATER	LA-505-411	U	< 100	ug/L	1.00	1.0e+02 06/09/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-50-8	Boron by ICP	WATER	LA-505-411	U	< 102.0	ug/L	1.00	102.0 06/09/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7429-90-5	Aluminum by ICP-MS	WATER	LA-505-412	U	< 13.8	ug/L	1.25	14 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-36-0	Antimony by ICP-MS	WATER	LA-505-412	U	< 0.625	ug/L	1.25	0.62 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-38-2	Arsenic by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-39-3	Barium by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-41-7	Beryllium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-43-9	Cadmium by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-47-3	Chromium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-48-4	Cobalt by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-50-8	Copper by ICP-MS	WATER	LA-505-412		1.18	ug/L	1.25	0.62 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7439-92-1	Lead by ICP-MS	WATER	LA-505-412	U	< 1.50	ug/L	1.25	1.5 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7439-96-5	Manganese by ICP-MS	WATER	LA-505-412		1.04	ug/L	1.25	0.38 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7439-97-6	Mercury by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7439-98-7	Molybdenum by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38 06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-02-0	Nickel by ICP-MS	WATER	LA-505-412		7.38	ug/L	1.25	0.62 06/10/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ						
W030000498	B171B1	TRENT	7782-49-2	Selenium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-22-4	Silver by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-28-0	Thallium by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-29-1	Thorium by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-61-1	Uranium by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-62-2	Vanadium by ICP-MS	WATER	LA-505-412	U	< 0.500	ug/L	1.25	0.50	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7440-66-6	Zinc by ICP-MS	WATER	LA-505-412		30.0	ug/L	1.25	5.0	06/10/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	TPH-G	Total Pet. Hydrocarbons Gas	WATER	NWTPH	U	< 250	ug/L		2.5e+02	06/04/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	13981-16-3	Pu-238 by AEA	WATER	LA-508-471	U	0.0960	pCi/L		0.12	06/12/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Pu-238 by AEA Total Cntg Error	WATER	LA-508-471		84.0	%		0.0	06/12/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Pu-239/240 AEA Total Cntg Err	WATER	LA-508-471		66.0	%		0.0	06/12/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	PU-239/240	Pu-239/240 by AEA	WATER	LA-508-471		0.0480	pCi/L		0.013	06/12/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	13982-63-3	Ra-226 Rel. % Count Error (AEA)	WATER	LA-508-471		60.0	%		0.0	06/17/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	13982-63-3	Ra-226 by AEA	WATER	LA-508-471		0.0420	pCi/L		0.026	06/17/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	E,T,C	Ra-228 Rel. % Count Error (GEA)	WATER	LA-508-481		160	%		0.0	06/17/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	15262-20-1	Ra-228 by GEA	WATER	LA-508-481	U	0.650	pCi/L		2.4	06/17/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	120-82-1	1,2,4-Trichlorobenzene	WATER	LA-523-456	U	< 3.50	ug/L	1.00	3.5	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	95-50-1	1,2-Dichlorobenzene (SV)	WATER	LA-523-456	U	< 4.90	ug/L	1.00	4.9	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	541-73-1	1,3-Dichlorobenzene	WATER	LA-523-456	U	< 8.00	ug/L	1.00	6.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	106-46-7	1,4-Dichlorobenzene (SV)	WATER	LA-523-456	U	< 5.80	ug/L	1.00	5.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	95-95-4	2,4,5-Trichlorophenol	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	88-06-2	2,4,6-Trichlorophenol	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	120-83-2	2,4-Dichlorophenol	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	105-67-9	2,4-Dimethylphenol	WATER	LA-523-456	U	< 5.00	ug/L	1.00	5.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	51-28-5	2,4-Dinitrophenol	WATER	LA-523-456	U	< 3.80	ug/L	1.00	3.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	121-14-2	2,4-Dinitrotoluene	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	606-20-2	2,6-Dinitrotoluene	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

**Page 5**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample</b>	<b>Receive</b>	
					<b>Method</b>	<b>RQ</b>						
W030000498	B171B1	TRENT	111-76-2	2-Butoxyethanol	WATER	LA-523-456	U	< 3.60	ug/L	1.00	3.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	91-58-7	2-Chloronaphthalene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	95-57-8	2-Chlorophenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	91-57-6	2-Methylnaphthalene	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	95-48-7	2-Methylphenol	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	88-74-4	2-Nitroaniline	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	88-75-5	2-Nitrophenol	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	65794-96-9	3 & 4 Methylphenol Total	WATER	LA-523-456	U	< 3.70	ug/L	1.00	3.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	91-94-1	3,3'-Dichlorobenzidine	WATER	LA-523-456	U	< 4.80	ug/L	1.00	4.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	99-09-2	3-Nitroaniline	WATER	LA-523-456	U	< 5.20	ug/L	1.00	5.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	101-55-3	4-Bromophenyl-phenylether	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	59-50-7	4-Chloro-3-methylphenol	WATER	LA-523-456	U	< 1.50	ug/L	1.00	1.5	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	106-47-8	4-Chloroaniline	WATER	LA-523-456	U	< 8.40	ug/L	1.00	8.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	7005-72-3	4-Chlorophenyl-phenylether	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	100-01-6	4-Nitroaniline	WATER	LA-523-456	U	< 3.40	ug/L	1.00	3.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	100-02-7	4-Nitrophenol	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	83-32-9	Acenaphthene	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	208-96-8	Acenaphthylene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	120-12-7	Anthracene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	56-55-3	Benzo(a)anthracene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	50-32-8	Benzo(a)pyrene	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	205-99-2	Benzo(b)fluoranthene	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	191-24-2	Benzo(g,h,i)perylene	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	207-08-9	Benzo(k)fluoranthene	WATER	LA-523-456	U	< 3.30	ug/L	1.00	3.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	100-51-6	Benzyl alcohol	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	117-81-7	Bis (2-Ethylhexyl) phthalate	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

*Page 6*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
FO3-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF						Analyze Sample	Receive
					Method	RQ	Result	Unit	DF	MDL		
W030000498	B171B1	TRENT	108-60-1	Bis(2-Chloro-1-methylene)	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	85-68-7	Butylbenzylphthalate	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	86-74-8	Carbazole	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	218-01-9	Chrysene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	84-74-2	Di-n-butylphthalate	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	117-84-0	Di-n-octylphthalate	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	53-70-3	Dibenz(a,h)anthracene	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	132-64-9	Dibenzofuran	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	84-66-2	Diethylphthalate	WATER	LA-523-456	U	< 7.30	ug/L	1.00	7.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	131-11-3	Dimethylphthalate	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	206-44-0	Fluoranthene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	86-73-7	Fluorene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	118-74-1	Hexachlorobenzene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	87-68-3	Hexachlorobutadiene	WATER	LA-523-456	U	< 4.20	ug/L	1.00	4.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	77-47-4	Hexachlorocyclopentadiene	WATER	LA-523-456	U	< 9.10	ug/L	1.00	9.1	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	67-72-1	Hexachloroethane	WATER	LA-523-456	U	< 6.40	ug/L	1.00	6.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	78-59-1	Isophorone	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	621-64-7	N-Nitroso-di-n-propylamine	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	86-30-6	N-Nitrosodiphenylamine	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	91-20-3	Naphthalene	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	98-95-3	Nitrobenzene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	87-86-5	Pentachlorophenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	85-01-8	Phenanthrene	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	108-95-2	Phenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	129-00-0	Pyrene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	126-73-8	Tri-n-butylphosphate	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF							Analyze Sample	Receive
					Method	RQ	Result	Unit	DF	MDL			
W030000498	B171B1	TRENT	111-44-4	bis(2-Chloroethyl)Eth	WATER	LA-523-456	U	< 4.00	ug/L	1.00	4.0	06/02/03	05/21/03
W030000498	B171B1	TRENT	111-91-1	bis(2-Chloroethoxy)methane	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03	05/21/03
W030000498	B171B1	TRENT	13966-29-5	U-234 by AEA	WATER	LA-508-471	U	0.0350	pCi/L		0.041	06/10/03	05/21/03
W030000498	B171B1	TRENT	E.T.C	U-234 by AEA Total Cntg Error	WATER	LA-508-471		88.0	%		0.0	06/10/03	05/21/03
W030000498	B171B1	TRENT	15117-96-1	U-235 by AEA	WATER	LA-508-471		0.0290	pCi/L		0.013	06/10/03	05/21/03
W030000498	B171B1	TRENT	E.T.C	U-235 by AEA Total Cntg Error	WATER	LA-508-471		84.0	%		0.0	06/10/03	05/21/03
W030000498	B171B1	TRENT	24678-82-8	U-238 by AEA	WATER	LA-508-471		0.0350	pCi/L		0.033	06/10/03	05/21/03
W030000498	B171B1	TRENT	E.T.C	U-238 by AEA Total Cntg Error	WATER	LA-508-471		81.0	%		0.0	06/10/03	05/21/03
W030000498	B171B1	TRENT	71-55-6	1,1,1-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	79-34-5	1,1,2,2-Tetrachloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	79-00-5	1,1,2-Trichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	75-34-3	1,1-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	75-35-4	1,1-Dichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	107-06-2	1,2-Dichloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	540-59-0	1,2-Dichloroethene (cis & tran)	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	78-87-5	1,2-Dichloropropane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	71-36-3	1-Butanol	WATER	LA-523-455	U	< 20.0	ug/L	1.00	20	06/03/03	05/21/03
W030000498	B171B1	TRENT	78-93-3	2-Butanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	591-78-6	2-Hexanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	107-87-9	2-Pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	108-10-1	4-Methyl-2-pentanone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	67-64-1	Acetone	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	71-43-2	Benzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	75-27-4	Bromodichloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	75-25-2	Bromoform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	74-83-9	Bromomethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03
W030000498	B171B1	TRENT	75-15-0	Carbon Disulfide	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03	05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample Receive</b>		
					<b>Method</b>	<b>RQ</b>						
W030000498	B171B1	TRENT	56-23-5	Carbon Tetrachloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	108-90-7	Chlorobenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	75-00-3	Chloroethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	67-66-3	Chloroform	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	74-87-3	Chloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	124-48-1	Dibromochloromethane	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	100-41-4	Ethylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	75-09-2	Methylene Chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	100-42-5	Styrene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	127-18-4	Tetrachloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	108-88-3	Toluene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	1330-20-7	Total Xylenes	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	79-01-6	Trichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	75-01-4	Vinyl Chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	10061-01-5	cis-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	104-51-8	n-Butylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	10061-02-6	trans-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	TPHKEROSENE	Kerosene	WATER	NWTPH	U	< 150	ug/L	1.00	1.5e+02	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	68476-34-6	Total Pet. Hydrocarbons Diesel	WATER	NWTPH	U	< 150	ug/L	1.00	1.5e+02	06/02/03 05/21/03 05/21/03
W030000498	B171B1	TRENT	84-15-1	ortho-Terphenyl	WATER	NWTPH		690	ug/L	1.00	6.1	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	57-12-5	Cyanide by Midi/Spectrophotom.	WATER	LA-695-402	U	< 4.00	ug/L		4.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	18540-29-9	Hexavalent chromium	WATER	LA-265-403	U	< 2.00e-03	ug/mL		2.0e-03	05/29/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	540-51-2	2-Bromoethanol	WATER	Organics		1.00e+04	ug/L		5.0e+03	06/04/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	60-29-7	Diethyl ether	WATER	Organics	U	< 5.00e+03	ug/L		5.0e+03	06/04/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	107-21-1	Ethylene glycol	WATER	Organics	U	< 5.00e+03	ug/L		5.0e+03	06/04/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	67-56-1	Methanol	WATER	Organics	U	< 1.00e+03	ug/L		1.0e+03	06/04/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14596-10-2	Am-241 by AEA	WATER	LA-508-471	U	0.100	pCi/L		0.14	06/10/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

**Page 9**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample</b>	<b>Receive</b>
					<b>Method</b>	<b>RQ</b>					
W030000499	B171B2	TRENT	E,T,C	Am-241 by AEA Total Cntg Error	WATER	LA-508-471		93.0	%	0.0	06/10/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	24959-67-9	Bromide (Br) by IC	WATER	LA-533-410	U	< 0.0450	mg/L	1.00	0.045 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	16887-00-6	Chloride (Cl) by IC	WATER	LA-533-410	U	< 0.0140	mg/L	1.00	0.014 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	16984-48-8	Fluoride (F) by IC	WATER	LA-533-410	U	< 7.00e-03	mg/L	1.00	7.0e-03 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	N03-N	Nitrate (N) by IC	WATER	LA-533-410	U	< 5.00e-03	mg/L	1.00	5.0e-03 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	N02-N	Nitrite (N) by IC	WATER	LA-533-410	U	< 9.00e-03	mg/L	1.00	9.0e-03 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14265-44-2	Phosphate (P) by IC	WATER	LA-533-410	U	< 0.0130	mg/L	1.00	0.013 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14808-79-8	Sulfate (SO4) by IC	WATER	LA-533-410	U	< 0.0240	mg/L	1.00	0.024 05/22/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ac-228 Rel. % Count Error (GEA)	WATER	LA-508-462		149	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14331-83-0	Ac-228 by GEA	WATER	LA-508-462	U	-8.63	pCi/L	21	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Am-241 Rel. % Count Error (GEA)	WATER	LA-508-462		215	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14596-10-2	Am-241 by GEA	WATER	LA-508-462	U	7.08	pCi/L	27	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Bi-212 Rel. % Count Error (GEA)	WATER	LA-508-462		452	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14913-49-6	Bi-212 by GEA	WATER	LA-508-462	U	-7.77	pCi/L	55	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Bi-214 Rel. % Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14733-03-0	Bi-214 by GEA	WATER	LA-508-462	U	-41.6	pCi/L	20	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ce-144 Rel. % Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14762-78-8	Ce-144 by GEA	WATER	LA-508-462	U	1.42	pCi/L	47	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Co-60 Rel. % Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	10198-40-0	Co-60 by GEA	WATER	LA-508-462	U	0.309	pCi/L	7.6	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Cs-134 Rel. % Count Error (GEA)	WATER	LA-508-462		457	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13967-70-9	Cs-134 by GEA	WATER	LA-508-462	U	-0.918	pCi/L	7.2	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Cs-137 Rel. % Count Error (GEA)	WATER	LA-508-462		278	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	10045-97-3	Cs-137 by GEA	WATER	LA-508-462	U	-1.75	pCi/L	7.1	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Eu-152 Rel. % Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14683-23-9	Eu-152 by GEA	WATER	LA-508-462	U	0.987	pCi/L	21	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Eu-154 Rel. % Count Error (GEA)	WATER	LA-508-462		161	%	0.0	06/03/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>						<b>Analyze Sample Receive</b>
					<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>Unit</b>	<b>DF</b>	<b>MDL</b>	
W030000499	B171B2	TRENT	15585-10-1	Eu-154 by GEA	WATER	LA-508-462	U	-7.30	pCi/L	20	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Eu-155 Rel.% Count Error (GEA)	WATER	LA-508-462		120	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14391-16-3	Eu-155 by GEA	WATER	LA-508-462	U	-11.5	pCi/L	22	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Nb-94 Rel.% Count Error (GEA)	WATER	LA-508-462		364	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14681-63-1	Nb-94 by GEA	WATER	LA-508-462	U	1.08	pCi/L	6.9	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Pb-212 Rel.% Count Error (GEA)	WATER	LA-508-462		817	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	15092-94-1	Pb-212 by GEA	WATER	LA-508-462	U	0.962	pCi/L	14	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Pb-214 Rel.% Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	15067-28-4	Pb-214 by GEA	WATER	LA-508-462	U	-57.7	pCi/L	20	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ra-226 Rel.% Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13982-63-3	Ra-226 by GEA	WATER	LA-508-462	U	-41.6	pCi/L	20	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ra-228 Rel.% Count Error (GEA)	WATER	LA-508-462		149	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	15262-20-1	Ra-228 by GEA	WATER	LA-508-462	U	-8.63	pCi/L	21	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ru-103 Rel.% Count Error (GEA)	WATER	LA-508-462		441	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13968-53-1	Ru-103 by GEA	WATER	LA-508-462	U	0.963	pCi/L	7.6	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Ru-106 Rel.% Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13967-48-1	Ru-106 by GEA	WATER	LA-508-462	U	0.0228	pCi/L	66	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Sb-125 Rel.% Count Error (GEA)	WATER	LA-508-462		630	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14234-35-6	Sb-125 by GEA	WATER	LA-508-462	U	-1.86	pCi/L	20	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Sn-113 Rel.% Count Error (GEA)	WATER	LA-508-462		1.00e+03	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13966-06-8	Sn-113 by GEA	WATER	LA-508-462	U	0.601	pCi/L	9.6	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Sn-126 Rel.% Count Error (GEA)	WATER	LA-508-462		197	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	15832-50-5	Sn-126 by GEA	WATER	LA-508-462	U	-4.86	pCi/L	14	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Th-234 Rel.% Count Error (GEA)	WATER	LA-508-462		100	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	15065-10-8	Th-234 by GEA	WATER	LA-508-462	U	-155	pCi/L	2.2e+02	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	E,T,C	Tl-208 Rel.% Count Error (GEA)	WATER	LA-508-462		259	%	0.0	06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	14913-50-9	Tl-208 by GEA	WATER	LA-508-462	U	-1.58	pCi/L	7.0	06/03/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>									
					<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze</b>	<b>Sample</b>	<b>Receive</b>	
W030000499	B171B2	TRENT	E.T.C	U-235 Rel.% Count Error (GEA)	WATER	LA-508-462		908	%	0.0	06/03/03	05/21/03	05/21/03	
W030000499	B171B2	TRENT	15117-96-1	U-235 by GEA	WATER	LA-508-462	U	-3.36	pCi/L	50	06/03/03	05/21/03	05/21/03	
W030000499	B171B2	TRENT	E.T.C	Zn-65 Rel.% Count Error (GEA)	WATER	LA-508-462		230	%	0.0	06/03/03	05/21/03	05/21/03	
W030000499	B171B2	TRENT	13982-39-3	Zn-65 by GEA	WATER	LA-508-462	U	-3.79	pCi/L	15	06/03/03	05/21/03	05/21/03	
W030000499	B171B2	TRENT	7440-69-9	Bismuth by ICP	WATER	LA-505-411	U	< 100	ug/L	1.00	1.0e+02	06/09/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-50-8	Boron by ICP	WATER	LA-505-411	U	< 102.0	ug/L	1.00	102.0	06/09/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7429-90-5	Aluminum by ICP-MS	WATER	LA-505-412	U	< 13.8	ug/L	1.25	14	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-36-0	Antimony by ICP-MS	WATER	LA-505-412	U	< 0.625	ug/L	1.25	0.62	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-38-2	Arsenic by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-39-3	Barium by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-41-7	Beryllium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-43-9	Cadmium by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-47-3	Chromium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-48-4	Cobalt by ICP-MS	WATER	LA-505-412	U	< 0.250	ug/L	1.25	0.25	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-50-8	Copper by ICP-MS	WATER	LA-505-412		1.95	ug/L	1.25	0.62	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7439-92-1	Lead by ICP-MS	WATER	LA-505-412	U	< 1.50	ug/L	1.25	1.5	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7439-96-5	Manganese by ICP-MS	WATER	LA-505-412		0.563	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7439-97-6	Mercury by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7439-98-7	Molybdenum by ICP-MS	WATER	LA-505-412		0.418	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-02-0	Nickel by ICP-MS	WATER	LA-505-412		0.680	ug/L	1.25	0.62	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7782-49-2	Selenium by ICP-MS	WATER	LA-505-412	U	< 0.375	ug/L	1.25	0.38	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-22-4	Silver by ICP-MS	WATER	LA-505-412		0.279	ug/L	1.25	0.25	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-28-0	Thallium by ICP-MS	WATER	LA-505-412		0.324	ug/L	1.25	0.12	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-29-1	Thorium by ICP-MS	WATER	LA-505-412		0.377	ug/L	1.25	0.25	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-61-1	Uranium by ICP-MS	WATER	LA-505-412	U	< 0.125	ug/L	1.25	0.12	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-62-2	Vanadium by ICP-MS	WATER	LA-505-412	U	< 0.500	ug/L	1.25	0.50	06/10/03	05/21/03	05/21/03
W030000499	B171B2	TRENT	7440-66-6	Zinc by ICP-MS	WATER	LA-505-412	U	< 5.00	ug/L	1.25	5.0	06/10/03	05/21/03	05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample</b>	<b>Receive</b>	
					<b>Method</b>	<b>RQ</b>						
W030000499	B171B2	TRENT	TPH-G	WATER	NWTPH	U	< 250	ug/L	2.5e+02	06/04/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	13981-16-3	WATER	LA-508-471	U	-0.0130	pCi/L	0.053	06/12/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	E,T,C	WATER	LA-508-471		150	%	0.0	06/12/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	E,T,C	WATER	LA-508-471		150	%	0.0	06/12/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	PU-239/240	WATER	LA-508-471	U	0.0130	pCi/L	0.033	06/12/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	13982-63-3	WATER	LA-508-471		282	%	0.0	06/17/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	13982-63-3	WATER	LA-508-471	U	6.70e-03	pCi/L	0.036	06/17/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	E,T,C	WATER	LA-508-481		1.00e+03	%	0.0	06/17/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	15262-20-1	WATER	LA-508-481	U	0.0320	pCi/L	1.9	06/17/03 05/21/03	05/21/03	
W030000499	B171B2	TRENT	120-82-1	WATER	LA-523-456	U	< 3.50	ug/L	1.00	3.5	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	95-50-1	WATER	LA-523-456	U	< 4.90	ug/L	1.00	4.9	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	541-73-1	WATER	LA-523-456	U	< 6.00	ug/L	1.00	6.0	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	106-46-7	WATER	LA-523-456	U	< 5.80	ug/L	1.00	5.8	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	95-95-4	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	88-06-2	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	120-83-2	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	105-67-9	WATER	LA-523-456	U	< 5.00	ug/L	1.00	5.0	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	51-28-5	WATER	LA-523-456	U	< 3.80	ug/L	1.00	3.8	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	121-14-2	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	606-20-2	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	111-76-2	WATER	LA-523-456	U	< 3.60	ug/L	1.00	3.6	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	91-58-7	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	95-57-8	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	91-57-6	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	95-48-7	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	88-74-4	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03	05/21/03
W030000499	B171B2	TRENT	88-75-5	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03	05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

*Page 13*

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample	Receive	
					Method	RQ						
W030000499	B171B2	TRENT	65794-96-9	3 & 4 Methylphenol Total	WATER	LA-523-456	U	< 3.70	ug/L	1.00	3.7	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	91-94-1	3,3'-Dichlorobenzidine	WATER	LA-523-456	U	< 4.80	ug/L	1.00	4.8	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	99-09-2	3-Nitroaniline	WATER	LA-523-456	U	< 5.20	ug/L	1.00	5.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	534-52-1	4,6-Dinitro-2-methylphenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	101-55-3	4-Bromophenyl-phenylether	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	59-50-7	4-Chloro-3-methylphenol	WATER	LA-523-456	U	< 1.50	ug/L	1.00	1.5	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	106-47-8	4-Chloroaniline	WATER	LA-523-456	U	< 8.40	ug/L	1.00	8.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	7005-72-3	4-Chlorophenyl-phenylether	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	100-01-6	4-Nitroaniline	WATER	LA-523-456	U	< 3.40	ug/L	1.00	3.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	100-02-7	4-Nitrophenol	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	83-32-9	Acenaphthene	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	208-98-8	Acenaphthylene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	120-12-7	Anthracene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	56-55-3	Benzo(a)anthracene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	50-32-8	Benzo(a)pyrene	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	205-99-2	Benzo(b)fluoranthene	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	191-24-2	Benzo(g,h,i)perylene	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	207-08-9	Benzo(k)fluoranthene	WATER	LA-523-456	U	< 3.30	ug/L	1.00	3.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	100-51-6	Benzyl alcohol	WATER	LA-523-456	U	< 2.10	ug/L	1.00	2.1	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	117-81-7	Bis (2-Ethylhexyl) phthalate	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	108-60-1	Bis(2-Chloro-1-methylene)	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	85-68-7	Butylbenzylphthalate	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	86-74-8	Carbazole	WATER	LA-523-456	U	< 1.60	ug/L	1.00	1.6	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	218-01-9	Chrysene	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	84-74-2	Di-n-butylphthalate	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	117-84-0	Di-n-octylphthalate	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	53-70-3	Dibenzof[a,h]anthracene	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample Receive		
					Method	RQ						
W030000499	B171B2	TRENT	132-64-9	Dibenzofuran	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	84-66-2	Diethylphthalate	WATER	LA-523-456	U	< 7.30	ug/L	1.00	7.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	131-11-3	Dimethylphthalate	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	206-44-0	Fluoranthene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	86-73-7	Fluorene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	118-74-1	Hexachlorobenzene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	87-68-3	Hexachlorobutadiene	WATER	LA-523-456	U	< 4.20	ug/L	1.00	4.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	77-47-4	Hexachlorocyclopentadiene	WATER	LA-523-456	U	< 9.10	ug/L	1.00	9.1	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	67-72-1	Hexachloroethane	WATER	LA-523-456	U	< 6.40	ug/L	1.00	6.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	193-39-5	Indeno(1,2,3-cd)pyrene	WATER	LA-523-456	U	< 3.00	ug/L	1.00	3.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	78-59-1	Isophorone	WATER	LA-523-456	U	< 2.20	ug/L	1.00	2.2	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	621-64-7	N-Nitroso-di-n-propylamine	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	86-30-6	N-Nitrosodiphenylamine	WATER	LA-523-456	U	< 2.70	ug/L	1.00	2.7	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	91-20-3	Naphthalene	WATER	LA-523-456	U	< 2.80	ug/L	1.00	2.8	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	98-95-3	Nitrobenzene	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	87-86-5	Pentachlorophenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	85-01-8	Phenanthrene	WATER	LA-523-456	U	< 2.60	ug/L	1.00	2.6	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	108-95-2	Phenol	WATER	LA-523-456	U	< 2.00	ug/L	1.00	2.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	129-00-0	Pyrene	WATER	LA-523-456	U	< 2.40	ug/L	1.00	2.4	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	126-73-8	Tri-n-butylphosphate	WATER	LA-523-456	U	< 2.90	ug/L	1.00	2.9	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	111-44-4	bis(-2-Chloroethyl)Eth	WATER	LA-523-456	U	< 4.00	ug/L	1.00	4.0	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	111-91-1	bis(2-Chloroethoxy)methane	WATER	LA-523-456	U	< 2.30	ug/L	1.00	2.3	06/02/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	13966-29-5	U-234 by AEA	WATER	LA-508-471	U	0.0390	pCi/L	0.053	06/10/03 05/21/03 05/21/03	
W030000499	B171B2	TRENT	E,T,C	U-234 by AEA Total Cntg Error	WATER	LA-508-471		93.0	%	0.0	06/10/03 05/21/03 05/21/03	
W030000499	B171B2	TRENT	15117-96-1	U-235 by AEA	WATER	LA-508-471		0.0240	pCi/L	0.013	06/10/03 05/21/03 05/21/03	
W030000499	B171B2	TRENT	E,T,C	U-235 by AEA Total Cntg Error	WATER	LA-508-471		91.0	%	0.0	06/10/03 05/21/03 05/21/03	
W030000499	B171B2	TRENT	24678-82-8	U-238 by AEA	WATER	LA-508-471	U	0.0310	pCi/L	0.047	06/10/03 05/21/03 05/21/03	

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

Sample #	Client ID	CAS #	Test Performed	Matrix	WSCF		Unit	DF	MDL	Analyze Sample Receive
					Method	RQ				
W030000499	B171B2	TRENT	E,T,C	WATER	LA-508-471	U	< 100	%	0.0	06/10/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	71-55-6	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	79-34-5	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	79-00-5	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-34-3	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-35-4	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	107-06-2	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	540-59-0	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	78-87-5	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	71-36-3	WATER	LA-523-455	U	< 20.0	ug/L	1.00	20 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	78-93-3	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	591-78-6	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	107-87-9	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	108-10-1	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	67-64-1	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	71-43-2	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-27-4	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-25-2	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	74-83-9	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-15-0	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	56-23-5	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	108-90-7	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	75-00-3	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	67-66-3	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	74-87-3	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	124-48-1	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03
W030000499	B171B2	TRENT	100-41-4	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0 06/03/03 05/21/03 05/21/03

**MDL=Minimum Detection Limit**

U - Analyzed for but not detected above limiting criteria.

**RQ=Result Qualifier**

**DF=Dilution Factor**

\* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

**Report W004/ver. 5.1**

**Ground Water Protection Program**

**Page 16**

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:**  
**Project:**

Steve Trent  
F03-007: 200-PW-2/PW-4

**Group #:** WSCF20030699

<b>Sample #</b>	<b>Client ID</b>	<b>CAS #</b>	<b>Test Performed</b>	<b>Matrix</b>	<b>WSCF</b>		<b>Unit</b>	<b>DF</b>	<b>MDL</b>	<b>Analyze Sample Receive</b>		
					<b>Method</b>	<b>RQ</b>						
W03000499	B171B2	TRENT	75-09-2	Methylene Chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	100-42-5	Styrene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	127-18-4	Tetrachloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	108-88-3	Toluene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	1330-20-7	Total Xylenes	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	79-01-6	Trichloroethene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	75-01-4	Vinyl Chloride	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	10061-01-5	cis-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	104-51-8	n-Butylbenzene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	10061-02-6	trans-1,3-Dichloropropene	WATER	LA-523-455	U	< 1.00	ug/L	1.00	1.0	06/03/03 05/21/03 05/21/03
W03000499	B171B2	TRENT		TPHKEROSENE	Kerosene	NWTPH	U	< 150	ug/L	1.00	1.5e+02	06/02/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	68476-34-6	Total Pet. Hydrocarbons Diesel	WATER	NWTPH	U	< 150	ug/L	1.00	1.5e+02	06/02/03 05/21/03 05/21/03
W03000499	B171B2	TRENT	84-15-1	ortho-Terphenyl	WATER	NWTPH		590	ug/L	1.00	6.1	06/02/03 05/21/03 05/21/03

**MDL** = Minimum Detection Limit

U - Analyzed for but not detected above limiting criteria.

**RQ** = Result Qualifier

**DF** = Dilution Factor

\* - Indicates results that have NOT been validated; + - indicates more than six qualifier symbols

*Report W004/ver. 5.1*

*Ground Water Protection Program*

**WSCF**  
**TENTATIVELY IDENTIFIED PEAK REPORT**

Attention:  
Project Number

Group #: 20030699

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
----------	-----------	-----------	-----------	------	----	----	--------	-------

RQ=Result Qualifier

This report may not be reproduced, except in its entirety without the written approval of the WSCF Laboratory.

# WSCF

## ANALYTICAL COMMENT REPORT

**Attention:** Steve Trent  
**Project Number** F03-007

**Group #:** WSCF20030699

Sample #	Client ID	Lab Area	Test	Comment
----------	-----------	----------	------	---------

VALGROUP

ICP-MS: High antimony preparation blank result and LCS recovery. No flags issued because sample results are below detection.

Samples W030000498-499 for Ra-226, U-ISO, and Pu tests all had poor reproducibility between sample and duplicate. RPD

is not applicable to low level samples.

B015: 2-Bromoethanol LCS out high at 140% Rec.gar

**Lab Areas:** VALGROUP - Group Validation  
LOGSAMP - Login for Sample

VALTEST - Test Validation  
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

This report may not be reproduced, except in its entirety without the written approval of the WSCF Laboratory.

# WSCF

## METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

<b>LA-265-403</b>	LA-265-403: Hexavalent Chromium analysis by Spectrophotometer EPA SW-846 7196	HEXAVALENT CHROMIUM
<b>LA-505-411</b>	LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE EPA SW-846 6010B	INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY
<b>LA-505-412</b>	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
<b>LA-508-462</b>	Gamma Energy Analysis -- the Genie System -- WSCF None	No reference to any industry method.
<b>LA-508-471</b>	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP None	No reference to any industry method.
<b>LA-508-481</b>	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE None	No reference to any industry method.
<b>LA-523-455</b>	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846 EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8260B	VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
<b>LA-523-456</b>	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at  
<http://apweb02/asponlinedocs/wscf/sample%20mgmt/ProcedureMethodCrossReference.pdf>. This document includes on-line  
links to full-text versions of the procedures and methods, where available.

Report Date: 19-jun-2003

Report #: WSCF20030699

Report W04M/2

# WSCF

## METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY EPA-600/R-94-111 300	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
LA-695-402	LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC EPA-600/4-79-020 335.2	Cyanide, Total
NWTPH	NWTPH-Diesel and/or Gasoline WDOE NWTPH-Dx/Gx	Total Petroleum Hydrocarbons - Diesel/Gasoline
Organics	Organics - Alcohols, Glycols EPA SW-846 8015B	Nonhalogenated Organics Using GC/FID

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at  
<http://apweb02/asponlinedocs/wscf/sample%20mgmt/ProcedureMethodCrossReference.pdf>. This document includes on-line links to full-text versions of the procedures and methods, where available.

Report Date: 19-jun-2003

Report #: WSCF20030699

Report W04M/2

Page 2

## W13q Worklist/Batch/QC Report for Group# WSCF20030699

WL#	S#	Batch	QC#	Tray	Type	Sample#	Test
19478	2	19867	22574	BLANK			Anions by Ion Chromatography
19478	10	19867	22574	BLANK			Anions by Ion Chromatography
19478	3	19867	22574	LCS			Anions by Ion Chromatography
19478	5	19867	22574	DUP		W030000498	Anions by Ion Chromatography
19478	6	19867	22574	MS		W030000498	Anions by Ion Chromatography
19478	7	19867	22574	MSD		W030000498	Anions by Ion Chromatography
19478	4	19867	22574	SAMPLE		W030000498	Anions by Ion Chromatography
19478	8	19867	22574	SAMPLE		W030000499	Anions by Ion Chromatography
				22611	BLANK		Hexavalent chromium
				22611	DUP		Hexavalent chromium
				22611	LCS		Hexavalent chromium
				22611	MS	W030000498	Hexavalent chromium
				22611	MSD	W030000498	Hexavalent chromium
				22611	SAMPLE	W030000498	Hexavalent chromium
				22611	SPK-RPD	W030000498	Hexavalent chromium
				22611	SAMPLE	W030000499	Hexavalent chromium
				22618	BLANK		SW-846 8270B Semi-Vols
				22618	LCS		SW-846 8270B Semi-Vols
				22618	MS	W030000498	SW-846 8270B Semi-Vols
				22618	MSD	W030000498	SW-846 8270B Semi-Vols
				22618	SAMPLE	W030000498	SW-846 8270B Semi-Vols
				22618	SPK-RPD	W030000498	SW-846 8270B Semi-Vols
				22618	SURR	W030000498	SW-846 8270B Semi-Vols
				22618	SAMPLE	W030000499	SW-846 8270B Semi-Vols
				22618	SURR	W030000499	SW-846 8270B Semi-Vols
19473	1	19863	22621	SAMPLE		W030000498	Gamma Energy Analysis-grd H2O
19473	2	19863	22621	SAMPLE		W030000499	Gamma Energy Analysis-grd H2O
				22624	BLANK		WTPH-D TPH Diesel Range (Wa)
				22624	LCS		WTPH-D TPH Diesel Range (Wa)
				22624	SAMPLE	W030000498	WTPH-D TPH Diesel Range (Wa)
				22624	SURR	W030000498	WTPH-D TPH Diesel Range (Wa)
				22624	MS	W030000499	WTPH-D TPH Diesel Range (Wa)
				22624	MSD	W030000499	WTPH-D TPH Diesel Range (Wa)
				22624	SAMPLE	W030000499	WTPH-D TPH Diesel Range (Wa)
				22624	SPK-RPD	W030000499	WTPH-D TPH Diesel Range (Wa)
				22624	SURR	W030000499	WTPH-D TPH Diesel Range (Wa)
				22640	BLANK		Cyanide by Midi/Spectrophotom
				22640	BLNK-PREP		Cyanide by Midi/Spectrophotom
				22640	DUP		Cyanide by Midi/Spectrophotom
				22640	LCS		Cyanide by Midi/Spectrophotom
				22640	LCS-2		Cyanide by Midi/Spectrophotom
				22640	MS	W030000498	Cyanide by Midi/Spectrophotom
				22640	MSD	W030000498	Cyanide by Midi/Spectrophotom
				22640	SAMPLE	W030000498	Cyanide by Midi/Spectrophotom
				22640	SPK-RPD	W030000498	Cyanide by Midi/Spectrophotom
				22640	SAMPLE	W030000499	Cyanide by Midi/Spectrophotom
19597	1	19986	22703	BLANK			ICP Metals Analysis, Grd H2O P
19597	2	19986	22703	LCS			ICP Metals Analysis, Grd H2O P

19597	4	19986	22703	MS	W030000121	ICP Metals Analysis, Grd H2O P
19597	5	19986	22703	MSD	W030000121	ICP Metals Analysis, Grd H2O P
19597	7	19986	22703	MS	W030000498	ICP Metals Analysis, Grd H2O P
19597	8	19986	22703	MSD	W030000498	ICP Metals Analysis, Grd H2O P
19597	6	19986	22703	SAMPLE	W030000498	ICP Metals Analysis, Grd H2O P
19597	0	19986	22703	SPK-RPD	W030000498	ICP Metals Analysis, Grd H2O P
19597	9	19986	22703	SAMPLE	W030000499	ICP Metals Analysis, Grd H2O P
19599	1	19988	22706	BLANK		ICP-2008 MS All possible metal
19599	3	19988	22706	LCS		ICP-2008 MS All possible metal
19599	4	19988	22706	MS	W030000498	ICP-2008 MS All possible metal
19599	5	19988	22706	MSD	W030000498	ICP-2008 MS All possible metal
19599	7	19988	22706	SAMPLE	W030000498	ICP-2008 MS All possible metal
19599	8	19988	22706	SAMPLE	W030000499	ICP-2008 MS All possible metal
19590	1	19980	22742	BLANK		Americium by AEA
19590	2	19980	22742	LCS		Americium by AEA
19590	3	19980	22742	DUP	W030000498	Americium by AEA
19590	4	19980	22742	SAMPLE	W030000498	Americium by AEA
19590	5	19980	22742	SAMPLE	W030000499	Americium by AEA
19591	1	19979	22743	BLANK		Plutonium Isotopics by AEA
19591	2	19979	22743	LCS		Plutonium Isotopics by AEA
19591	3	19979	22743	DUP	W030000498	Plutonium Isotopics by AEA
19591	4	19979	22743	SAMPLE	W030000498	Plutonium Isotopics by AEA
19591	5	19979	22743	SAMPLE	W030000499	Plutonium Isotopics by AEA
19589	1	19978	22750	BLANK		Uranium Isotopics by AEA
19589	2	19978	22750	LCS		Uranium Isotopics by AEA
19589	3	19978	22750	DUP	W030000498	Uranium Isotopics by AEA
19589	4	19978	22750	SAMPLE	W030000498	Uranium Isotopics by AEA
19589	5	19978	22750	SAMPLE	W030000499	Uranium Isotopics by AEA
19531	2	19919	22778	BLANK		Ra-226 by AEA and GEA
19531	4	19919	22778	LCS		Ra-226 by AEA and GEA
19531	6	19919	22778	DUP	W030000498	Ra-226 by AEA and GEA
19531	7	19919	22778	SAMPLE	W030000498	Ra-226 by AEA and GEA
19531	9	19919	22778	SAMPLE	W030000499	Ra-226 by AEA and GEA
19531	1	19919	22778	BLANK		Ra-228 by GEA
19531	3	19919	22778	LCS		Ra-228 by GEA
19531	5	19919	22778	DUP	W030000498	Ra-228 by GEA
19531	8	19919	22778	SAMPLE	W030000498	Ra-228 by GEA
19531	10	19919	22778	SAMPLE	W030000499	Ra-228 by GEA
19645	1	20034	22788	BLANK		Alcohols, Glycols - 8015
19645	2	20034	22788	LCS		Alcohols, Glycols - 8015
19645	4	20034	22788	MS	W030000498	Alcohols, Glycols - 8015
19645	5	20034	22788	MSD	W030000498	Alcohols, Glycols - 8015
19645	3	20034	22788	SAMPLE	W030000498	Alcohols, Glycols - 8015
19645	5	20034	22788	SPK-RPD	W030000498	Alcohols, Glycols - 8015
19645	6	20034	22788	SAMPLE	W030000499	Alcohols, Glycols - 8015
19646	1	20035	22791	BLANK		NWTPH-GX TPH Gasoline Range
19646	2	20035	22791	LCS		NWTPH-GX TPH Gasoline Range
19646	4	20035	22791	DUP	W030000498	NWTPH-GX TPH Gasoline Range
19646	5	20035	22791	MS	W030000498	NWTPH-GX TPH Gasoline Range
19646	6	20035	22791	MSD	W030000498	NWTPH-GX TPH Gasoline Range
19646	3	20035	22791	SAMPLE	W030000498	NWTPH-GX TPH Gasoline Range
19646	6	20035	22791	SPK-RPD	W030000498	NWTPH-GX TPH Gasoline Range
19646	7	20035	22791	SAMPLE	W030000499	NWTPH-GX TPH Gasoline Range

22797	BLANK		VOA Ground Water Protection
22797	LCS		VOA Ground Water Protection
22797	MS	W030000498	VOA Ground Water Protection
22797	MSD	W030000498	VOA Ground Water Protection
22797	SAMPLE	W030000498	VOA Ground Water Protection
22797	SPK-RPD	W030000498	VOA Ground Water Protection
22797	SURR	W030000498	VOA Ground Water Protection
22797	SAMPLE	W030000499	VOA Ground Water Protection
22797	SURR	W030000499	VOA Ground Water Protection

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Anions by Ion Chromatography

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Bromide (Br) by IC	24959-67-9	n/a	RPD	05/22/03	0.000	20.000
DUP	Chloride (Cl) by IC	16887-00-6	n/a	RPD	05/22/03	0.000	20.000
DUP	Fluoride (F) by IC	16984-48-8	n/a	RPD	05/22/03	0.000	20.000
DUP	Nitrite (N) by IC	NO2-N	n/a	RPD	05/22/03	0.000	20.000
DUP	Nitrate (N) by IC	NO3-N	n/a	RPD	05/22/03	0.000	20.000
DUP	Phosphate (P) by IC	14265-44-2	n/a	RPD	05/22/03	0.000	20.000
DUP	Sulfate (SO4) by IC	14808-79-8	n/a	RPD	05/22/03	0.000	20.000
MS	Bromide (Br) by IC	24959-67-9	98.995	% Recov	05/22/03	75.000	125.000
MS	Chloride (Cl) by IC	16887-00-6	105.051	% Recov	05/22/03	75.000	125.000
MS	Fluoride (F) by IC	16984-48-8	105.112	% Recov	05/22/03	75.000	125.000
MS	Nitrite (N) by IC	NO2-N	93.849	% Recov	05/22/03	75.000	125.000
MS	Nitrate (N) by IC	NO3-N	98.430	% Recov	05/22/03	75.000	125.000
MS	Phosphate (P) by IC	14265-44-2	95.516	% Recov	05/22/03	75.000	125.000
MS	Sulfate (SO4) by IC	14808-79-8	101.015	% Recov	05/22/03	75.000	125.000
MSD	Bromide (Br) by IC	24959-67-9	98.492	% Recov	05/22/03	75.000	125.000
MSD	Chloride (Cl) by IC	16887-00-6	104.040	% Recov	05/22/03	75.000	125.000
MSD	Fluoride (F) by IC	16984-48-8	105.317	% Recov	05/22/03	75.000	125.000
MSD	Nitrite (N) by IC	NO2-N	91.667	% Recov	05/22/03	75.000	125.000
MSD	Nitrate (N) by IC	NO3-N	97.309	% Recov	05/22/03	75.000	125.000
MSD	Phosphate (P) by IC	14265-44-2	95.725	% Recov	05/22/03	75.000	125.000
MSD	Sulfate (SO4) by IC	14808-79-8	100.000	% Recov	05/22/03	75.000	125.000

## BATCH QC

BLANK	Bromide (Br) by IC	24959-67-9	< 4.50e-2	mg/L	05/22/03	0.000	300.000
BLANK	Bromide (Br) by IC	24959-67-9	< 4.50e-2	mg/L	05/23/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	< 1.40e-2	mg/L	05/23/03	0.000	300.000
BLANK	Chloride (Cl) by IC	16887-00-6	< 1.40e-2	mg/L	05/22/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	< 7.00e-3	mg/L	05/22/03	0.000	300.000
BLANK	Fluoride (F) by IC	16984-48-8	< 7.00e-3	mg/L	05/23/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	< 9.00e-3	mg/L	05/22/03	0.000	300.000
BLANK	Nitrite (N) by IC	NO2-N	< 9.00e-3	mg/L	05/23/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	< 5.00e-3	mg/L	05/22/03	0.000	300.000
BLANK	Nitrate (N) by IC	NO3-N	< 5.00e-3	mg/L	05/23/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	< 1.30e-2	mg/L	05/22/03	0.000	300.000
BLANK	Phosphate (P) by IC	14265-44-2	< 1.30e-2	mg/L	05/23/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	< 2.40e-2	mg/L	05/22/03	0.000	300.000
BLANK	Sulfate (SO4) by IC	14808-79-8	< 2.40e-2	mg/L	05/23/03	0.000	300.000
LCS	Bromide (Br) by IC	24959-67-9	99.751	% Recov	05/22/03	80.000	120.000
LCS	Chloride (Cl) by IC	16887-00-6	107.000	% Recov	05/22/03	80.000	120.000
LCS	Fluoride (F) by IC	16984-48-8	107.396	% Recov	05/22/03	80.000	120.000
LCS	Nitrite (N) by IC	NO2-N	92.157	% Recov	05/22/03	80.000	120.000
LCS	Nitrate (N) by IC	NO3-N	99.001	% Recov	05/22/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
Matrix: WATER  
Test: Anions by Ion Chromatography

SAF Number: F03-007  
Sample Date:  
Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
LCS	Phosphate (P) by IC	14265-44-2	98.039	% Recov	06/22/03	80.000	120.000
LCS	Sulfate (SO4) by IC	14808-79-8	100.000	% Recov	05/22/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Hexavalent chromium

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Hexavalent chromium	18540-29-9	106.827	% Recov	05/29/03	85.000	115.000
MSD	Hexavalent chromium	18540-29-9	100.803	% Recov	05/29/03	85.000	115.000
SPK-RPD	Hexavalent chromium	18540-29-9	5.803	RPD	05/29/03	0.000	20.000

## BATCH QC

BLANK	Hexavalent chromium	18540-29-9	<0.002	Ratio	05/29/03	0.000	2.000
DUP	Hexavalent chromium	18540-29-9	n/a	RPD	05/29/03	0.000	15.000
LCS	Hexavalent chromium	18540-29-9	104.731	% Recov	05/29/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
<b>Lab ID: W030000498</b>								
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>								
MS	1,2,4-Trichlorobenzene	120-82-1	82.900	% Recov	06/02/03	50.000	120.000	
MS	1,4-Dichlorobenzene (SV)	106-46-7	76.500	% Recov	06/02/03	41.000	113.000	
MS	2,4-Dinitrotoluene	121-14-2	84.600	% Recov	06/02/03	65.000	109.000	
MS	2-Fluorophenol	Surr	367-12-4	88.300	% Recov	06/02/03	50.000	110.000
MS	Acenaphthene		83-32-9	88.600	% Recov	06/02/03	62.000	112.000
MS	4-Chloro-3-methylphenol		59-50-7	92.300	% Recov	06/02/03	59.000	115.000
MS	2-Chlorophenol		95-57-8	89.600	% Recov	06/02/03	69.000	111.000
MS	N-Nitroso-di-n-propylamine		621-64-7	96.800	% Recov	06/02/03	69.000	115.000
MS	2-Fluorobiphenyl	Surr	321-60-8	80.400	% Recov	06/02/03	58.000	109.000
MS	Phenol		108-95-2	97.600	% Recov	06/02/03	59.000	115.000
MS	Nitrobenzene-d5	Surr	4165-60-0	90.200	% Recov	06/02/03	60.000	118.000
MS	4-Nitrophenol		100-02-7	94.800	% Recov	06/02/03	32.000	130.000
MS	Pentachlorophenol		87-86-5	90.600	% Recov	06/02/03	51.000	121.000
MS	Phenol-d5	Surr	4165-62-2	86.700	% Recov	06/02/03	59.000	116.000
MS	Pyrene		129-00-0	89.800	% Recov	06/02/03	58.000	116.000
MS	2,4,6-Tribromophenol	Surr	118-79-6	91.100	% Recov	06/02/03	60.000	120.000
MS	Terphenyl-d14	Surr	98904-43-9	93.100	% Recov	06/02/03	60.000	120.000
MSD	1,2,4-Trichlorobenzene		120-82-1	83.900	% Recov	06/02/03	50.000	120.000
MSD	1,4-Dichlorobenzene (SV)		106-46-7	74.800	% Recov	06/02/03	41.000	113.000
MSD	2,4-Dinitrotoluene		121-14-2	86.700	% Recov	06/02/03	65.000	109.000
MSD	2-Fluorophenol	Surr	367-12-4	82.800	% Recov	06/02/03	50.000	110.000
MSD	Acenaphthene		83-32-9	92.900	% Recov	06/02/03	62.000	112.000
MSD	4-Chloro-3-methylphenol		59-50-7	92.600	% Recov	06/02/03	59.000	115.000
MSD	2-Chlorophenol		95-57-8	89.000	% Recov	06/02/03	69.000	111.000
MSD	N-Nitroso-di-n-propylamine		621-64-7	99.300	% Recov	06/02/03	69.000	115.000
MSD	2-Fluorobiphenyl	Surr	321-60-8	85.200	% Recov	06/02/03	58.000	109.000
MSD	Phenol		108-95-2	95.700	% Recov	06/02/03	59.000	115.000
MSD	Nitrobenzene-d5	Surr	4165-60-0	82.600	% Recov	06/02/03	60.000	118.000
MSD	4-Nitrophenol		100-02-7	103.000	% Recov	06/02/03	32.000	130.000
MSD	Pentachlorophenol		87-86-5	90.300	% Recov	06/02/03	51.000	121.000
MSD	Phenol-d5	Surr	4165-62-2	86.900	% Recov	06/02/03	59.000	116.000
MSD	Pyrene		129-00-0	96.000	% Recov	06/02/03	58.000	116.000
MSD	2,4,6-Tribromophenol	Surr	118-79-6	97.400	% Recov	06/02/03	60.000	120.000
MSD	Terphenyl-d14	Surr	98904-43-9	85.200	% Recov	06/02/03	60.000	120.000
SPK-RPD	1,2,4-Trichlorobenzene		120-82-1	1.199	RPD	06/02/03	0.000	25.000
SPK-RPD	1,4-Dichlorobenzene (SV)		106-46-7	2.247	RPD	06/02/03	0.000	25.000
SPK-RPD	2,4-Dinitrotoluene		121-14-2	2.452	RPD	06/02/03	0.000	25.000
SPK-RPD	2-Fluorophenol	Surr	367-12-4	93.771	% Recov	06/02/03	50.000	110.000
SPK-RPD	Acenaphthene		83-32-9	4.738	RPD	06/02/03	0.000	25.000
SPK-RPD	4-Chloro-3-methylphenol		59-50-7	0.324	RPD	06/02/03	0.000	25.000
SPK-RPD	2-Chlorophenol		95-57-8	0.672	RPD	06/02/03	0.000	25.000
SPK-RPD	N-Nitroso-di-n-propylamine		621-64-7	2.550	RPD	06/02/03	0.000	25.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte		CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
SPK-RPD	2-Fluorobiphenyl	Surr	321-60-8	105.970	% Recov	06/02/03	58.000	109.000
SPK-RPD	Phenol		108-95-2	1.966	RPD	06/02/03	0.000	16.000
SPK-RPD	Nitrobenzene-d5	Surr	4165-60-0	91.574	% Recov	06/02/03	60.000	118.000
SPK-RPD	4-Nitrophenol		100-02-7	8.291	RPD	06/02/03	0.000	25.000
SPK-RPD	Pentachlorophenol		87-86-5	0.332	RPD	06/02/03	0.000	25.000
SPK-RPD	Phenol-d5	Surr	4165-62-2	100.231	% Recov	06/02/03	59.000	116.000
SPK-RPD	Pyrene		129-00-0	6.674	RPD	06/02/03	0.000	25.000
SPK-RPD	2,4,6-Tribromophenol	Surr	118-79-6	106.915	% Recov	06/02/03	60.000	120.000
SPK-RPD	Terphenyl-d14	Surr	98904-43-9	91.515	% Recov	06/02/03	60.000	120.000
SURR	2-Fluorophenol	Surr	367-12-4	83.800	% Recov	06/02/03	50.000	110.000
SURR	2-Fluorobiphenyl	Surr	321-60-8	82.500	% Recov	06/02/03	58.000	109.000
SURR	Nitrobenzene-d5	Surr	4165-60-0	76.000	% Recov	06/02/03	60.000	118.000
SURR	Phenol-d5	Surr	4165-62-2	84.100	% Recov	06/02/03	59.000	116.000
SURR	2,4,6-Tribromophenol	Surr	118-79-6	82.800	% Recov	06/02/03	60.000	120.000
SURR	Terphenyl-d14	Surr	98904-43-9	82.200	% Recov	06/02/03	60.000	120.000

Lab ID: W030000499

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	2-Fluorophenol	Surr	367-12-4	84.400	% Recov	06/02/03	50.000	110.000
SURR	2-Fluorobiphenyl	Surr	321-60-8	87.900	% Recov	06/02/03	58.000	109.000
SURR	Nitrobenzene-d5	Surr	4165-60-0	90.500	% Recov	06/02/03	60.000	118.000
SURR	Phenol-d5	Surr	4165-62-2	81.600	% Recov	06/02/03	59.000	116.000
SURR	2,4,6-Tribromophenol	Surr	118-79-6	85.600	% Recov	06/02/03	60.000	120.000
SURR	Terphenyl-d14	Surr	98904-43-9	101.000	% Recov	06/02/03	60.000	120.000

## BATCH QC

BLANK	1,2-Dichlorobenzene (SV)		95-50-1	< 4.2	ug/L	06/02/03		
BLANK	1,2,4-Trichlorobenzene		120-82-1	< 3.0	ug/L	06/02/03		
BLANK	1,3-Dichlorobenzene		541-73-1	< 5.2	ug/L	06/02/03		
BLANK	1,4-Dichlorobenzene (SV)		106-46-7	< 5.0	ug/L	06/02/03		
BLANK	2,4-Dichlorophenol		120-83-2	< 1.4	ug/L	06/02/03		
BLANK	2,4-Dinitrotoluene		121-14-2	< 1.8	ug/L	06/02/03		
BLANK	2,4,5-Trichlorophenol		95-95-4	< 1.9	ug/L	06/02/03		
BLANK	2,4,6-Trichlorophenol		88-06-2	< 2.4	ug/L	06/02/03		
BLANK	2,4-Dimethylphenol		105-67-9	< 4.3	ug/L	06/02/03		
BLANK	2,6-Dinitrotoluene		606-20-2	< 2.2	ug/L	06/02/03		
BLANK	2-Butoxyethanol		111-78-2	< 3.1	mg/L	06/02/03		
BLANK	2-Chloronaphthalene		91-58-7	< 2.3	ug/L	06/02/03		
BLANK	2-Fluorophenol	Surr	367-12-4	90.800	% Recov	06/02/03	50.000	110.000
BLANK	2-Methylnaphthalene		91-57-6	< 1.9	ug/L	06/02/03		
BLANK	2-Methylphenol		95-48-7	< 2.3	ug/L	06/02/03		
BLANK	2-Nitroaniline		88-74-4	< 2.1	mg/L	06/02/03		
BLANK	2-Nitrophenol		88-76-5	< 2.0	ug/L	06/02/03		
BLANK	3 & 4 Methylphenol Total		65794-96-9	< 3.2	ug/L	06/02/03	0.000	5.000
BLANK	3-Nitroaniline		99-09-2	< 4.5	mg/L	06/02/03		
BLANK	4,6-Dinitro-2-methylphenol		534-52-1	< 1.7	ug/L	06/02/03		

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-007  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
BLANK	4-Bromophenyl-phenylether	101-55-3	< 1.9	ug/L	06/02/03		
BLANK	4-Chlorophenyl-phenylether	7005-72-3	< 2.2	ug/L	06/02/03		
BLANK	Acenaphthene	83-32-9	< 2.4	ug/L	06/02/03		
BLANK	Acenaphthylene	208-96-8	< 2.3	ug/L	06/02/03		
BLANK	Anthracene	120-12-7	< 2.0	ug/L	06/02/03		
BLANK	bis(-2-Chloroethyl)Eth	111-44-4	< 3.4	mg/L	06/02/03		
BLANK	Benzo(a)anthracene	56-55-3	< 2.1	ug/L	06/02/03		
BLANK	Benzo(b)fluoranthene	205-99-2	< 1.7	ug/L	06/02/03		
BLANK	Benzo(g,h,i)perylene	191-24-2	< 2.5	ug/L	06/02/03		
BLANK	Benzo(a)pyrene	50-32-8	< 1.9	ug/L	06/02/03		
BLANK	bis(2-Chloroethoxy)methane	111-91-1	< 2.0	ug/L	06/02/03		
BLANK	Bis (2-Ethylhexyl) phthalate	117-81-7	< 2.6	mg/L	06/02/03		
BLANK	Bis(2-Chloro-1-methylene)	108-60-1	< 2.1	ug/L	06/02/03	0.000	10.000
BLANK	Benzyl alcohol	100-51-6	< 1.8	mg/L	06/02/03		
BLANK	Benzo(k)fluoranthene	207-08-9	< 2.8	ug/L	06/02/03		
BLANK	Butylbenzylphthalate	85-68-7	< 2.0	mg/L	06/02/03		
BLANK	Carbazole	86-74-8	< 1.4	mg/L	06/02/03		
BLANK	4-Chloroaniline	106-47-8	< 7.2	mg/L	06/02/03		
BLANK	4-Chloro-3-methylphenol	59-50-7	< 1.3	ug/L	06/02/03		
BLANK	2-Chlorophenol	95-57-8	< 1.7	ug/L	06/02/03		
BLANK	Chrysene	218-01-9	< 2.3	ug/L	06/02/03		
BLANK	3,3'-Dichlorobenzidine	91-94-1	< 4.1	ug/L	06/02/03		
BLANK	Dibenz(a,h)anthracene	53-70-3	< 2.6	ug/L	06/02/03		
BLANK	Dibenzofuran	132-64-9	< 1.9	mg/L	06/02/03		
BLANK	Di-n-butylphthalate	84-74-2	< 2.1	mg/L	06/02/03		
BLANK	Diethylphthalate	84-66-2	< 6.3	mg/L	06/02/03		
BLANK	Dimethylphthalate	131-11-3	< 2.1	mg/L	06/02/03		
BLANK	2,4-Dinitrophenol	51-28-5	< 3.3	ug/L	06/02/03		
BLANK	Di-n-octylphthalate	117-84-0	< 2.5	mg/L	06/02/03		
BLANK	N-Nitrosodi-n-propylamine	621-64-7	< 1.7	ug/L	06/02/03		
BLANK	2-Fluorobiphenyl Surr	321-60-8	73.600	% Recov	06/02/03	58.000	108.000
BLANK	Fluorene	86-73-7	< 2.0	ug/L	06/02/03		
BLANK	Fluoranthene	206-44-0	< 2.1	ug/L	06/02/03		
BLANK	Hexachlorobenzene	118-74-1	< 2.1	ug/L	06/02/03		
BLANK	Hexachlorobutadiene	87-68-3	< 3.6	ug/L	06/02/03		
BLANK	Hexachlorocyclopentadiene	77-47-4	< 7.8	ug/L	06/02/03		
BLANK	Hexachloroethane	67-72-1	< 5.5	ug/L	06/02/03		
BLANK	Indeno(1,2,3-cd)pyrene	193-39-5	< 2.6	ug/L	06/02/03		
BLANK	Isophorone	78-59-1	< 1.9	mg/L	06/02/03		
BLANK	Phenol	108-95-2	< 1.7	ug/L	06/02/03		
BLANK	Naphthalene	91-20-3	< 2.4	ug/L	06/02/03		
BLANK	Nitrobenzene-d5 Surr	4165-60-0	103.000	% Recov	06/02/03	60.000	118.000
BLANK	Nitrobenzene	98-95-3	< 2.0	ug/L	06/02/03		
BLANK	4-Nitrophenol	100-02-7	< 1.4	ug/L	06/02/03		
BLANK	4-Nitroaniline	100-01-6	< 2.9	mg/L	06/02/03		
BLANK	N-Nitrosodiphenylamine	86-30-6	< 2.3	ug/L	06/02/03		

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-007  
 Sample Date:  
 Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit	
BLANK	Pentachlorophenol	87-86-5	< 1.7	ug/L	06/02/03			
BLANK	Phenanthrene	85-01-8	< 2.2	ug/L	06/02/03			
BLANK	Phenol-d5	Surr	4165-62-2	86.300	% Recov	06/02/03	59.000	116.000
BLANK	Pyrene		129-00-0	< 2.1	ug/L	06/02/03		
BLANK	Tri-n-butylphosphate		126-73-8	< 2.5	mg/L	06/02/03		
BLANK	2,4,6-Tribromophenol	Surr	118-79-6	78.200	% Recov	06/02/03	60.000	120.000
BLANK	Terphenyl-d14	Surr	98904-43-9	101.000	% Recov	06/02/03	60.000	120.000
LCS	1,2,4-Trichlorobenzene		120-82-1	77.100	% Recov	06/02/03	46.000	107.000
LCS	1,4-Dichlorobenzene (SV)		106-46-7	76.300	% Recov	06/02/03	42.000	111.000
LCS	2,4-Dinitrotoluene		121-14-2	88.300	% Recov	06/02/03	59.000	106.000
LCS	2-Fluorophenol	Surr	367-12-4	93.400	% Recov	06/02/03	50.000	110.000
LCS	Acenaphthene		83-32-9	90.400	% Recov	06/02/03	61.000	116.000
LCS	4-Chloro-3-methylphenol		59-50-7	90.800	% Recov	06/02/03	61.000	106.000
LCS	2-Chlorophenol		95-57-8	91.600	% Recov	06/02/03	66.000	106.000
LCS	N-Nitroso-di-n-propylamine		621-64-7	99.800	% Recov	06/02/03	71.000	114.000
LCS	2-Fluorobiphenyl	Surr	321-60-8	86.000	% Recov	06/02/03	58.000	109.000
LCS	Phenol		108-95-2	95.100	% Recov	06/02/03	67.000	105.000
LCS	Nitrobenzene-d5	Surr	4165-60-0	90.900	% Recov	06/02/03	60.000	118.000
LCS	4-Nitrophenol		100-02-7	98.400	% Recov	06/02/03	32.000	118.000
LCS	Pentachlorophenol		87-86-5	95.900	% Recov	06/02/03	62.000	114.000
LCS	Phenol-d5	Surr	4165-62-2	93.100	% Recov	06/02/03	59.000	116.000
LCS	Pyrene		129-00-0	96.700	% Recov	06/02/03	66.000	118.000
LCS	2,4,6-Tribromophenol	Surr	118-79-6	97.900	% Recov	06/02/03	60.000	120.000
LCS	Terphenyl-d14	Surr	98904-43-9	100.000	% Recov	06/02/03	60.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

SURR	ortho-Terphenyl	84-15-1	113.000	% Recov	06/02/03	70.000	130.000
------	-----------------	---------	---------	---------	----------	--------	---------

Lab ID: W030000499

## BATCH QC ASSOCIATED WITH SAMPLE

MS	ortho-Terphenyl	84-15-1	107.000	% Recov	06/02/03	70.000	130.000
MS	Total Pet. Hydrocarbons Diesel	68476-34-6	91.200	% Recov	06/02/03	75.000	125.000
MSD	ortho-Terphenyl	84-15-1	103.000	% Recov	06/02/03	70.000	130.000
MSD	Total Pet. Hydrocarbons Diesel	68476-34-6	88.600	% Recov	06/02/03	75.000	125.000
SPK-RPD	ortho-Terphenyl	84-15-1	3.810	RPD	06/02/03	0.000	20.000
SPK-RPD	Total Pet. Hydrocarbons Diesel	68476-34-6	2.892	RPD	06/02/03	0.000	20.000
SURR	ortho-Terphenyl	84-15-1	97.400	% Recov	06/02/03	70.000	130.000

## BATCH QC

BLANK	Kerosene	TPHKEROSENE	< 120	ug/L	06/02/03	-999.000	999.000
BLANK	ortho-Terphenyl	84-15-1	530.83	% Recov	06/02/03	70.000	130.000
BLANK	Total Pet. Hydrocarbons Diesel	68476-34-6	< 120	mg/L	06/02/03	0.000	300.000
LCS	Kerosene	TPHKEROSENE	80.200	% Recov	06/02/03	70.000	130.000
LCS	ortho-Terphenyl	84-15-1	110.000	% Recov	06/02/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Cyanide by Midi/Spectrophotom

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000498</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Cyanide by Midi/Spectrophotom	57-12-5	103.500	% Recov	06/03/03	75.000	125.000
MSD	Cyanide by Midi/Spectrophotom	57-12-5	91.600	% Recov	06/03/03	75.000	125.000
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	12.199	RPD	06/03/03	0.000	20.000

## BATCH QC

BLANK	Cyanide by Midi/Spectrophotom	57-12-5	3.893	ug/L	06/03/03	-4.000	4.000
BLNK-PREP	Cyanide by Midi/Spectrophotom	57-12-5	2.60	ug/L	06/03/03	-4.000	4.000
DUP	Cyanide by Midi/Spectrophotom	57-12-5	n/a	RPD	06/03/03	0.000	20.000
LCS	Cyanide by Midi/Spectrophotom	57-12-5	99.150	% Recov	06/03/03	85.000	115.000
LCS-2	Cyanide by Midi/Spectrophotom	57-12-5	n/a	% Recov	06/03/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: ICP Metals Analysis, Grd H2O P

SAF Number: F03-007  
 Sample Date: 03/19/03  
 Receive Date: 03/19/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000121

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Boron by ICP	7440-50-8	1.740	% Recov	06/09/03	70.000	130.000
MSD	Boron by ICP	7440-50-8	1.910	% Recov	06/09/03	75.000	125.000

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

MS	Boron by ICP	7440-50-8	107.220	% Recov	06/09/03	70.000	130.000
MS	Bismuth by ICP	7440-69-9	106.280	% Recov	06/09/03	75.000	125.000
MSD	Boron by ICP	7440-50-8	102.220	% Recov	06/09/03	75.000	125.000
MSD	Bismuth by ICP	7440-69-9	101.220	% Recov	06/09/03	75.000	125.000
SPK-RPD	Boron by ICP	7440-50-8	4.775	RPD	06/09/03	0.000	20.000
SPK-RPD	Bismuth by ICP	7440-69-9	4.877	RPD	06/09/03	0.000	20.000

## BATCH QC

BLANK	Boron by ICP	7440-50-8	<102	ug/L	06/09/03	-10.000	10.000
BLANK	Bismuth by ICP	7440-69-9	1.7e-2	Ratio	06/09/03	-6.000	6.000
LCS	Boron by ICP	7440-50-8	105.900	% Recov	06/09/03	85.000	115.000
LCS	Bismuth by ICP	7440-69-9	105.400	% Recov	06/09/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: ICP-2008 MS All possible metal

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000498</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	Silver by ICP-MS	7440-22-4	98.750	% Recov	06/10/03	70.000	130.000
MS	Aluminum by ICP-MS	7429-90-5	101.500	% Recov	06/10/03	70.000	130.000
MS	Arsenic by ICP-MS	7440-38-2	101.500	% Recov	06/10/03	70.000	130.000
MS	Barium by ICP-MS	7440-39-3	98.000	% Recov	06/10/03	70.000	130.000
MS	Beryllium by ICP-MS	7440-41-7	93.250	% Recov	06/10/03	70.000	130.000
MS	Cadmium by ICP-MS	7440-43-9	98.000	% Recov	06/10/03	70.000	130.000
MS	Cobalt by ICP-MS	7440-48-4	98.500	% Recov	06/10/03	70.000	130.000
MS	Chromium by ICP-MS	7440-47-3	101.500	% Recov	06/10/03	70.000	130.000
MS	Copper by ICP-MS	7440-50-8	103.750	% Recov	06/10/03	70.000	130.000
MS	Mercury by ICP-MS	7439-97-6	94.000	% Recov	06/10/03	70.000	130.000
MS	Manganese by ICP-MS	7439-96-5	101.250	% Recov	06/10/03	70.000	130.000
MS	Molybdenum by ICP-MS	7439-98-7	101.000	% Recov	06/10/03	70.000	130.000
MS	Nickel by ICP-MS	7440-02-0	96.000	% Recov	06/10/03	70.000	130.000
MS	Lead by ICP-MS	7439-92-1	100.750	% Recov	06/10/03	70.000	130.000
MS	Antimony by ICP-MS	7440-36-0	122.500	% Recov	06/10/03	70.000	130.000
MS	Selenium by ICP-MS	7782-49-2	94.500	% Recov	06/10/03	70.000	130.000
MS	Thorium by ICP-MS	7440-29-1	102.500	% Recov	06/10/03	70.000	130.000
MS	Thallium by ICP-MS	7440-28-0	96.250	% Recov	06/10/03	70.000	130.000
MS	Uranium by ICP-MS	7440-61-1	98.500	% Recov	06/10/03	70.000	130.000
MS	Vanadium by ICP-MS	7440-62-2	99.750	% Recov	06/10/03	70.000	130.000
MS	Zinc by ICP-MS	7440-66-6	91.500	% Recov	06/10/03	70.000	130.000
MSD	Silver by ICP-MS	7440-22-4	100.000	% Recov	06/10/03	70.000	130.000
MSD	Aluminum by ICP-MS	7429-90-5	109.500	% Recov	06/10/03	70.000	130.000
MSD	Arsenic by ICP-MS	7440-38-2	97.000	% Recov	06/10/03	70.000	130.000
MSD	Barium by ICP-MS	7440-39-3	97.500	% Recov	06/10/03	70.000	130.000
MSD	Beryllium by ICP-MS	7440-41-7	98.000	% Recov	06/10/03	70.000	130.000
MSD	Cadmium by ICP-MS	7440-43-9	97.250	% Recov	06/10/03	70.000	130.000
MSD	Cobalt by ICP-MS	7440-48-4	93.500	% Recov	06/10/03	70.000	130.000
MSD	Chromium by ICP-MS	7440-47-3	97.000	% Recov	06/10/03	70.000	130.000
MSD	Copper by ICP-MS	7440-50-8	97.000	% Recov	06/10/03	70.000	130.000
MSD	Mercury by ICP-MS	7439-97-6	90.500	% Recov	06/10/03	70.000	130.000
MSD	Manganese by ICP-MS	7439-96-5	96.750	% Recov	06/10/03	70.000	130.000
MSD	Molybdenum by ICP-MS	7439-98-7	99.750	% Recov	06/10/03	70.000	130.000
MSD	Nickel by ICP-MS	7440-02-0	90.000	% Recov	06/10/03	70.000	130.000
MSD	Lead by ICP-MS	7439-92-1	98.000	% Recov	06/10/03	70.000	130.000
MSD	Antimony by ICP-MS	7440-36-0	118.750	% Recov	06/10/03	70.000	130.000
MSD	Selenium by ICP-MS	7782-49-2	93.500	% Recov	06/10/03	70.000	130.000
MSD	Thorium by ICP-MS	7440-29-1	98.500	% Recov	06/10/03	70.000	130.000
MSD	Thallium by ICP-MS	7440-28-0	94.250	% Recov	06/10/03	70.000	130.000
MSD	Uranium by ICP-MS	7440-61-1	94.500	% Recov	06/10/03	70.000	130.000
MSD	Vanadium by ICP-MS	7440-62-2	97.250	% Recov	06/10/03	70.000	130.000
MSD	Zinc by ICP-MS	7440-66-6	80.750	% Recov	06/10/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699

Matrix: WATER

Test: ICP-2008 MS All possible metal

SAF Number: F03-007

Sample Date: 05/21/03

Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>BATCH QC</b>							
BLANK	Silver by ICP-MS	7440-22-4	<0.250	ug/L	06/10/03	-0.440	0.440
BLANK	Aluminum by ICP-MS	7429-90-5	<13.8	ug/L	06/10/03	-24.200	24.200
BLANK	Arsenic by ICP-MS	7440-38-2	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Barium by ICP-MS	7440-39-3	<0.250	ug/L	06/10/03	-0.440	0.440
BLANK	Beryllium by ICP-MS	7440-41-7	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Cadmium by ICP-MS	7440-43-9	<0.125	ug/L	06/10/03	-0.220	0.220
BLANK	Cobalt by ICP-MS	7440-48-4	<0.250	ug/L	06/10/03	-0.440	0.440
BLANK	Chromium by ICP-MS	7440-47-3	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Copper by ICP-MS	7440-50-8	<0.625	ug/L	06/10/03	-1.100	1.100
BLANK	Mercury by ICP-MS	7439-97-6	<0.125	ug/L	06/10/03	-0.220	0.220
BLANK	Manganese by ICP-MS	7439-96-5	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Molybdenum by ICP-MS	7439-98-7	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Nickel by ICP-MS	7440-02-0	<0.625	ug/L	06/10/03	-1.100	1.100
BLANK	Lead by ICP-MS	7439-92-1	<1.50	ug/L	06/10/03	-2.640	2.640
BLANK	Antimony by ICP-MS	7440-36-0	1.75	ug/L	06/10/03	-1.100	1.100
BLANK	Selenium by ICP-MS	7782-49-2	<0.375	ug/L	06/10/03	-0.660	0.660
BLANK	Thorium by ICP-MS	7440-29-1	0.295	ug/L	06/10/03	-0.440	0.440
BLANK	Thallium by ICP-MS	7440-28-0	<0.125	ug/L	06/10/03	-0.220	0.220
BLANK	Uranium by ICP-MS	7440-61-1	<0.125	ug/L	06/10/03	-0.220	0.220
BLANK	Vanadium by ICP-MS	7440-62-2	<0.500	ug/L	06/10/03	-0.880	0.880
BLANK	Zinc by ICP-MS	7440-66-6	<5.00	ug/L	06/10/03	-8.800	8.800
LCS	Silver by ICP-MS	7440-22-4	102.750	% Recov	06/10/03	85.000	115.000
LCS	Aluminum by ICP-MS	7429-90-5	101.500	% Recov	06/10/03	85.000	115.000
LCS	Arsenic by ICP-MS	7440-38-2	102.250	% Recov	06/10/03	85.000	115.000
LCS	Barium by ICP-MS	7440-39-3	102.500	% Recov	06/10/03	85.000	115.000
LCS	Beryllium by ICP-MS	7440-41-7	105.750	% Recov	06/10/03	85.000	115.000
LCS	Cadmium by ICP-MS	7440-43-9	101.000	% Recov	06/10/03	85.000	115.000
LCS	Cobalt by ICP-MS	7440-48-4	100.250	% Recov	06/10/03	85.000	115.000
LCS	Chromium by ICP-MS	7440-47-3	105.500	% Recov	06/10/03	85.000	115.000
LCS	Copper by ICP-MS	7440-50-8	104.750	% Recov	06/10/03	85.000	115.000
LCS	Mercury by ICP-MS	7439-97-6	96.500	% Recov	06/10/03	85.000	115.000
LCS	Manganese by ICP-MS	7439-96-5	105.000	% Recov	06/10/03	85.000	115.000
LCS	Molybdenum by ICP-MS	7439-98-7	105.000	% Recov	06/10/03	85.000	115.000
LCS	Nickel by ICP-MS	7440-02-0	104.500	% Recov	06/10/03	85.000	115.000
LCS	Lead by ICP-MS	7439-92-1	102.500	% Recov	06/10/03	85.000	115.000
LCS	Antimony by ICP-MS	7440-36-0	126.250	% Recov	06/10/03	85.000	115.000
LCS	Selenium by ICP-MS	7782-49-2	99.000	% Recov	06/10/03	85.000	115.000
LCS	Thorium by ICP-MS	7440-29-1	104.250	% Recov	06/10/03	85.000	115.000
LCS	Thallium by ICP-MS	7440-28-0	98.000	% Recov	06/10/03	85.000	115.000
LCS	Uranium by ICP-MS	7440-61-1	101.500	% Recov	06/10/03	85.000	115.000
LCS	Vanadium by ICP-MS	7440-62-2	103.000	% Recov	06/10/03	85.000	115.000
LCS	Zinc by ICP-MS	7440-66-6	101.750	% Recov	06/10/03	85.000	115.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Americium by AEA

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Am-241 by AEA	14596-10-2	2.500	RPD	06/10/03	0.000	20.000
-----	---------------	------------	-------	-----	----------	-------	--------

## BATCH QC

BLANK	Am-241 by AEA	14596-10-2	1.7e-01	pCi/L	06/10/03	-100.000	100.000
LCS	Am-241 by AEA	14596-10-2	101.100	% Recov	06/10/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Plutonium Isotopes by AEA

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000498</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
DUP	Pu-239/240 by AEA	PU-239/240	25.455	RPD	06/12/03	0.000	20.000

## BATCH QC

BLANK	Pu-239/240 by AEA	PU-239/240	1.3e-02	pCi/L	06/12/03	-100.000	100.000
LCS	Pu-239/240 by AEA	PU-239/240	103.200	% Recov	06/12/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Uranium Isotopes by AEA

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	U-238 by AEA	24678-82-8	25.806	RPD	06/10/03	0.000	20.000
-----	--------------	------------	--------	-----	----------	-------	--------

## BATCH QC

BLANK	U-238 by AEA	24678-82-8	3.1e-02	pCi/L	06/10/03	-100.000	100.000
-------	--------------	------------	---------	-------	----------	----------	---------

LCS	U-238 by AEA	24678-82-8	108.000	% Recov	06/10/03	75.000	125.000
-----	--------------	------------	---------	---------	----------	--------	---------

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Ra-226 by AEA and GEA

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Ra-226 by AEA	13982-63-3	100.000	RPD	06/17/03	0.000	20.000
-----	---------------	------------	---------	-----	----------	-------	--------

## BATCH QC

BLANK	Ra-226 by AEA	13982-63-3	1.6e-02	pCi/L	06/17/03	0.000	1000.000
LCS	Ra-226 by AEA	13982-63-3	104.000	% Recov	06/17/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Ra-228 by GEA

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Ra-228 by GEA	15262-20-1	7.407	RPD	06/17/03	0.000	20.000
-----	---------------	------------	-------	-----	----------	-------	--------

## BATCH QC

BLANK	Ra-228 by GEA	15262-20-1	7.0e-02	mg/L	06/17/03	0.000	1000.000
LCS	Ra-228 by GEA	15262-20-1	111.000	% Recov	06/17/03	75.000	125.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: Alcohols, Glycols - 8015

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

MS	2-Bromoethanol	540-51-2	102.000	% Recove	06/04/03	70.000	125.000
MS	Diethyl ether	60-29-7	116.000	% Recove	06/04/03	75.000	125.000
MS	Ethylene glycol	107-21-1	101.000	% Recove	06/04/03	75.000	125.000
MS	Methanol	67-56-1	95.000	% Recove	06/04/03	75.000	125.000
MSD	2-Bromoethanol	540-51-2	117.000	% Recove	06/04/03	70.000	125.000
MSD	Diethyl ether	60-29-7	104.000	% Recove	06/04/03	75.000	125.000
MSD	Ethylene glycol	107-21-1	91.000	% Recove	06/04/03	75.000	125.000
MSD	Methanol	67-56-1	92.000	% Recove	06/04/03	75.000	125.000
SPK-RPD	2-Bromoethanol	540-51-2	13.699	RPD	06/04/03	0.000	20.000
SPK-RPD	Diethyl ether	60-29-7	10.909	RPD	06/04/03	0.000	20.000
SPK-RPD	Ethylene glycol	107-21-1	10.417	RPD	06/04/03	0.000	20.000
SPK-RPD	Methanol	67-56-1	3.209	RPD	06/04/03	0.000	20.000

## BATCH QC

BLANK	2-Bromoethanol	540-51-2	97	ug/Kg	06/04/03	0.000	10.000
BLANK	Diethyl ether	60-29-7	< 5000	ug/L	06/04/03	0.000	10.000
BLANK	Ethylene glycol	107-21-1	< 5000	ug/L	06/04/03	0.000	5.000
BLANK	Methanol	67-56-1	< 5000	ug/L	06/04/03	0.000	10.000
LCS	2-Bromoethanol	540-51-2	140.000	% Recove	06/04/03	70.000	130.000
LCS	Diethyl ether	60-29-7	104.000	% Recove	06/04/03	70.000	130.000
LCS	Ethylene glycol	107-21-1	106.000	% Recove	06/04/03	70.000	130.000
LCS	Methanol	67-56-1	84.000	% Recove	06/04/03	70.000	130.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: NWTPH-GX TPH Gasoline Range

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
---------	---------	-------	---------	-------	---------------	-------------	-------------

Lab ID: W030000498

## BATCH QC ASSOCIATED WITH SAMPLE

DUP	Total Pet. Hydrocarbons Gas	TPH-G	n/a	RPD	06/04/03	0.000	20.000
MS	Total Pet. Hydrocarbons Gas	TPH-G	108.000	% Recov	06/04/03	75.000	125.000
MSD	Total Pet. Hydrocarbons Gas	TPH-G	111.000	% Recov	06/04/03	75.000	125.000
SPK-RPD	Total Pet. Hydrocarbons Gas	TPH-G	2.740	RPD	06/04/03	0.000	20.000

## BATCH QC

BLANK	Total Pet. Hydrocarbons Gas	TPH-G	< 250	mg/L	06/04/03	0.000	300.000
LCS	Total Pet. Hydrocarbons Gas	TPH-G	106.000	%rec	06/04/03	80.000	120.000

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699  
 Matrix: WATER  
 Test: VOA Ground Water Protection

SAF Number: F03-007  
 Sample Date: 05/21/03  
 Receive Date: 05/21/03

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
<b>Lab ID: W030000498</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
MS	1,1-Dichloroethene	75-35-4	88.000	% Recov	06/03/03	63.000	117.000
MS	Benzene	71-43-2	104.000	% Recov	06/03/03	75.000	129.000
MS	4-Bromofluorobenzene Surr	460-00-4	96.000	% Recov	06/03/03	84.000	116.000
MS	Chlorobenzene	108-90-7	108.000	% Recov	06/03/03	79.000	119.000
MS	1,2-Dichloroethane-d4 Surr	17060-07-0	106.000	% Recov	06/03/03	82.000	136.000
MS	Toluene-d8 Surr	2037-26-5	102.000	% Recov	06/03/03	89.000	119.000
MS	Toluene	108-88-3	108.000	% Recov	06/03/03	76.000	120.000
MS	Trichloroethene	79-01-6	104.000	% Recov	06/03/03	73.000	123.000
MSD	1,1-Dichloroethene	75-35-4	88.000	% Recov	06/03/03	63.000	117.000
MSD	Benzene	71-43-2	100.000	% Recov	06/03/03	75.000	129.000
MSD	4-Bromofluorobenzene Surr	460-00-4	96.000	% Recov	06/03/03	84.000	116.000
MSD	Chlorobenzene	108-90-7	104.000	% Recov	06/03/03	79.000	119.000
MSD	1,2-Dichloroethane-d4 Surr	17060-07-0	106.000	% Recov	06/03/03	82.000	136.000
MSD	Toluene-d8 Surr	2037-26-5	102.000	% Recov	06/03/03	89.000	119.000
MSD	Toluene	108-88-3	104.000	% Recov	06/03/03	76.000	120.000
MSD	Trichloroethene	79-01-6	104.000	% Recov	06/03/03	73.000	123.000
SPK-RPD	1,1-Dichloroethene	75-35-4	0.000	RPD	06/03/03	0.000	10.000
SPK-RPD	Benzene	71-43-2	3.922	RPD	06/03/03	0.000	10.000
SPK-RPD	Chlorobenzene	108-90-7	3.774	RPD	06/03/03	0.000	10.000
SPK-RPD	1,2-Dichloroethane-d4 Surr	17060-07-0	0.000	RPD	06/03/03	0.000	25.000
SPK-RPD	Toluene-d8 Surr	2037-26-5	0.000	RPD	06/03/03	0.000	25.000
SPK-RPD	Toluene	108-88-3	3.774	RPD	06/03/03	0.000	10.000
SPK-RPD	Trichloroethene	79-01-6	0.000	RPD	06/03/03	0.000	10.000
SURR	4-Bromofluorobenzene Surr	460-00-4	98.000	% Recov	06/03/03	84.000	116.000
SURR	1,2-Dichloroethane-d4 Surr	17060-07-0	106.000	% Recov	06/03/03	82.000	136.000
SURR	Toluene-d8 Surr	2037-26-5	102.000	% Recov	06/03/03	89.000	119.000
<b>Lab ID: W030000499</b>							
<b>BATCH QC ASSOCIATED WITH SAMPLE</b>							
SURR	4-Bromofluorobenzene Surr	460-00-4	98.000	% Recov	06/03/03	84.000	116.000
SURR	1,2-Dichloroethane-d4 Surr	17060-07-0	104.000	% Recov	06/03/03	82.000	136.000
SURR	Toluene-d8 Surr	2037-26-5	102.000	% Recov	06/03/03	89.000	119.000
<b>BATCH QC</b>							
BLANK	1,1-Dichloroethane	75-34-3	< 1.0	ug/L	06/03/03		
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	ug/L	06/03/03		
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	ug/L	06/03/03		
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	ug/L	06/03/03	0.000	5.000
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	ug/L	06/03/03		
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	ug/L	06/03/03		
BLANK	1,2-Dichloroethene (cis & tran)	540-59-0	< 1.0	ug/L	06/03/03		
BLANK	1-Butanol	71-36-3	< 20	mg/L	06/03/03		

# WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20030699

Matrix: WATER

Test: VOA Ground Water Protection

SAF Number: F03-007

Sample Date:

Receive Date:

QC Type	Analyte	CAS #	Results	Units	Analysis Date	Lower Limit	Upper Limit
BLANK	2-Hexanone	591-78-6	< 1.0	mg/L	06/03/03		
BLANK	2-Pentanone	107-87-9	< 1.0	mg/L	06/03/03		
BLANK	4-Methyl-2-pentanone	108-10-1	< 1.0	mg/L	06/03/03		
BLANK	Acetone	67-64-1	< 1.0	mg/L	06/03/03		
BLANK	Bromodichloromethane	75-27-4	< 1.0	ug/L	06/03/03		
BLANK	Benzene	71-43-2	< 1.0	ug/L	06/03/03		
BLANK	4-Bromofluorobenzene Surr	460-00-4	98.000	% Recov	06/03/03	84.000	116.000
BLANK	Bromoform	75-25-2	< 1.0	mg/L	06/03/03		
BLANK	n-Butylbenzene	104-51-8	< 1.0	ug/L	06/03/03		
BLANK	Carbon Disulfide	75-15-0	< 1.0	mg/L	06/03/03		
BLANK	Carbon Tetrachloride	56-23-5	< 1.0	mg/L	06/03/03		
BLANK	Dibromochloromethane	124-48-1	< 1.0	ug/L	06/03/03		
BLANK	Chloroform	67-66-3	< 1.0	mg/L	06/03/03		
BLANK	Chlorobenzene	108-90-7	< 1.0	ug/L	06/03/03		
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	ug/L	06/03/03		
BLANK	Chloroethane	75-00-3	< 1.0	ug/L	06/03/03		
BLANK	1,2-Dichloroethane-d4 Surr	17060-07-0	102.000	% Recov	06/03/03	82.000	136.000
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	ug/L	06/03/03		
BLANK	Ethylbenzene	100-41-4	< 1.0	ug/L	06/03/03		
BLANK	Bromomethane	74-83-9	< 1.0	ug/L	06/03/03		
BLANK	Chloromethane	74-87-3	< 1.0	ug/L	06/03/03		
BLANK	2-Butanone	78-93-3	< 1.0	mg/L	06/03/03		
BLANK	Methylene Chloride	75-09-2	< 1.0	ug/L	06/03/03		
BLANK	Tetrachloroethene	127-18-4	< 1.0	ug/L	06/03/03		
BLANK	Styrene	100-42-5	< 1.0	ug/L	06/03/03		
BLANK	Total Xylenes	1330-20-7	< 1.0	ug/L	06/03/03	0.000	5.000
BLANK	Toluene-d8 Surr	2037-26-5	100.000	% Recov	06/03/03	89.000	119.000
BLANK	Toluene	108-88-3	< 1.0	ug/L	06/03/03		
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	ug/L	06/03/03		
BLANK	Trichloroethene	79-01-6	< 1.0	ug/L	06/03/03		
BLANK	Vinyl Chloride	75-01-4	< 1.0	mg/L	06/03/03		
LCS	1,1-Dichloroethene	75-35-4	84.000	% Recov	06/03/03	70.000	130.000
LCS	Benzene	71-43-2	104.000	% Recov	06/03/03	70.000	130.000
LCS	4-Bromofluorobenzene Surr	460-00-4	98.000	% Recov	06/03/03	84.000	116.000
LCS	Chlorobenzene	108-90-7	108.000	% Recov	06/03/03	70.000	130.000
LCS	1,2-Dichloroethane-d4 Surr	17060-07-0	108.000	% Recov	06/03/03	82.000	136.000
LCS	Toluene-d8 Surr	2037-26-5	104.000	% Recov	06/03/03	89.000	119.000
LCS	Toluene	108-88-3	104.000	% Recov	06/03/03	70.000	130.000
LCS	Trichloroethene	79-01-6	104.000	% Recov	06/03/03	70.000	130.000

**T4180-03-SLF-012**

**ATTACHMENT 3**

**SAMPLE RECEIPT INFORMATION**

Consisting of 3 pages  
Cover page not included

**Waste Sampling and Characterization Facility**  
 P.O. BOX 1970 S3-30, Richland, WA 99352  
 PHONE: (509) 373-7004/FAX: (509) 373-7134

~~Deleted~~

UISO-WS

KB  
6/13/03

**ACKNOWLEDGMENT OF SAMPLES RECEIVED**

**Ground Water Protection Program**

Richland, WA 99352  
 Attn: Steve Trent

Customer Code: GPP  
 PO#: 117504/ES10  
 Group#: 20030699  
 Project#: F03-007  
 Proj Mgr: STEVE TRENT  
 Phone: 373-5869

The following samples were received from you on 05/21/03. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date			
W030000498	B171B1	TRENT @2008 @GEA-GPP @TPHD-WA	Water @8015GPP @IC-30 @TPHG-WA	@AEA-30 @ICP-GPP @VOA-GPP	@AEA-31 @RA22630 CN-02	@AEA-32 @RA22830 CR+6	05/21/03
W030000499	B171B2	TRENT @2008 @GEA-GPP @TPHD-WA	Water @8015GPP @IC-30 @TPHG-WA	@AEA-30 @ICP-GPP @VOA-GPP	@AEA-31 @RA22630 CN-02	@AEA-32 @RA22830 CR+6	05/21/03

**Test Acronym Description**

Test Acronym	Description
@2008	ICP-2008 MS All possible metal
@8015GPP	Alcohols, Glycols - 8015
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@IC-30	Anions by Ion Chromatography
@ICP-GPP	ICP Metals Analysis, Grd H2O P
@RA22630	Ra-226 by AEA and GEA
@RA22830	Ra-228 by GEA
@SVOCGPP	SW-846 8270B Semi-Vols
@TPHD-WA	WTPH-D TPH Diesel Range (Wa)
@TPHG-WA	NWTPH-GX TPH Gasoline Range
@VOA-GPP	VOA Ground Water Protection
CN-02	Cyanide by Midi/Spectrophotom
CR+6	Hexavalent chromium

**COPY**

6/19

FH-Central Plateau Project		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST							F03-007-10		Page 1 of 2		
Collector Johansen/Pfister/Pope		Company Contact LC Hulstrom			Telephone No. 373-3928		Project Coordinator TRENT, SJ		Price Code 7N		Data Turnaround		
Project Designation 200-PW-2/200-PW-4 OU - QC Sampling		Sampling Location 200-PW-2					SAF No. F03-007		Air Quality <input type="checkbox"/>		30 Days		
Ice Chest No. GPP-03-016 - 017		Field Logbook No. HNF-N-3361		COA 117504ES10		Method of Shipment Federal Express							
Shipped To Waste Sampling & Characterization		Offsite Property No. N/A			Bill of Lading/Air Bill No. N/A								
POSSIBLE SAMPLE HAZARDS/REMARKS N/A			Preservation	HCl or H <sub>2</sub> SO <sub>4</sub> to pH <2 Cool	Cool 4C	Cool 4C	HNO <sub>3</sub> to pH <2	H <sub>2</sub> SO <sub>4</sub> to pH <2	Cool 4C	HCl to pH <2 Cool 4C	HCl to pH <2 Cool 4C	NaOH to pH >= 12 Cool 4C	HNO <sub>3</sub> to pH <2
Special Handling and/or Storage N/A			Type of Container	aGs*	aGs*	aG	G		P	aG	aG	P	P
Z0030699			No. of Container(s)	3	3	4	2		1	2	2	1	1
SAMPLE ANALYSIS			Volume	40mL	40mL	1000mL	1000mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL
			See item (1) in Special Instructions.	See item (2) in Special Instructions.	See item (3) in Special Instructions.	See item (4) in Special Instructions.	See item (5) in Special Instructions.	Caution (IC) - 300.7 (Nitrogen in ammonium)	TPH-Diesel Range - WTPH-D	TPH-Gasoline Range - WTPH-G	Cyanide (Total) - 335.2	See item (6) in Special Instructions.	
Sample No.	Matrix *	Sample Date	Sample Time										
B171B1	W030004FF8	WATER	5-21-03	100	X	X	X	X	X	X	X	X	
B171B2	water	5-21-03	0930		X	X	X		X	X	X	X	
<b>COPY</b>													
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					** The laboratory is to report both kerosene and diesel range compounds from the WTPH-D analysis.				S=Soil SE=Sediment SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other	
MURKIN/BENJAMIN	5-21-03	RECEIVED KB	5/21/03					(1) VOA - 8260A (TCL); VOA - 8260A (Add-On) {2-Pentanone, Benzyl alcohol, n-Butylbenzene} •(2) Alcohols, Glycols, & Ketones - 8015 {1-Butanol, Diethyl ether, Ethylene glycol, Methanol} •(3) Semi-VOA - 8270A (TCL); Semi-VOA - 8270A (Add-On) {2-Butoxyethanol, Tributyl phosphate} •(4) Trace Elements ICP/MS - 200.8 (Complete) {Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Uranium}; Isotopic Uranium ICP Metals - 6010A (Add-on) {Bismuth, Boron}					
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					(5) IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate}; Chromium Hex - 7196					
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					(6) Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Cesium-134, Tin-126}					
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					U-AEA not Uso-ICP T.K. 6-13-03					
LABORATORY SECTION	Received By							Title				Date/Time	
ALL SAMPLE POSITION	Disposal Method							Disposed By				Date/Time	

FH-Central Plateau Project		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						F03-007-10	Page 2 of 2			
Collector Johansen/Pfister/Pope		Company Contact LC Hulstrom		Telephone No. 373-3928		Project Coordinator TRENT, SJ		Price Code	7N	Data Turnaround		
Project Designation 200-PW-2/200-PW-4 OU - QC Sampling		Sampling Location 200-PW-2				SAF No. F03-007		Air Quality	<input type="checkbox"/>	30 Days		
Ice Chest No. GPP-D13-016; 017		Field Logbook No. HNF-N-3361		COA 117504ES10		Method of Shipment Federal Express						
Shipped To Waste Sampling & Characterization		Offsite Property No. N/A				Bill of Lading/Air Bill No. N/A						
POSSIBLE SAMPLE HAZARDS/REMARKS  N/A				Preservation	HNO <sub>3</sub> to pH ≤2	HNO <sub>3</sub> to pH ≤2	HNO <sub>3</sub> to pH ≤2	HNO <sub>3</sub> to pH ≤2				
Special Handling and/or Storage  N/A				Type of Container	P	P	P	P				
				No. of Container(s)	1	1	1	2				
				Volume	1000mL	1000mL	1000mL	1000mL				
SAMPLE ANALYSIS				Americium-241	Isotopic Plutonium	Isotopic Uranium	Isotopic Radium (Radium-226, Radium-228)					
Sample No.	Matrix *	Sample Date	Sample Time									
B171B1	WATER	5-21-03	1100	X	X	X	X					
B171B2	Water	5-21-03	0930	X	X	X	X					
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS			Matrix *	
Relinquished By/Removed From <i>Johansen/Johansen</i>	Date/Time 5-21-03 1315	Received By/Stored In <i>Bob</i>	Date/Time 5-21-03 1315					** The laboratory is to report both kerosene and diesel range compounds from the WTPH-D analysis.			S=Soil SE=Sediment SO=Solid S=Sludge W= Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue W=Wipe L=Liquid V=Vegetation X=Other	
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time									
LABORATORY SECTION	Title								Date/Time			
NAL SAMPLE POSITION	Disposal Method								Disposed By			
									Date/Time			

COPY